INDICATORI ED OSCILLATORI

http://www.eis.pl/kr/AFM/index.htm

Absolute Breadth Index by Norman G. Fosback
Absolute Breadth Index – NYSE

```
{NYSE data}
Abs(Security("X.NYSE-A",O) - Security("X.NYSE-D",O))
```

Accumulation/Distribution

```
ShortMA:= input("Enter shorter moving average periods",3,10,3);
LongMA:= input("Enter longer moving averageperiods",10,30,10);
mov( ad(), ShortMA, E) - mov( ad(), LongMA,E);
```

Accumulation / Distribution - Special

```
Cum(((C*4) - ((H+L) + (Ref((H+L),-1))))*VOLUME)
```

Adaptive RSI by Perry Kaufman
Adaptive RSI

```
Period := Input("Period",1,10000,20);
sc := Abs(RSI(Period)/100 - .5)*2;
If(Cum(1) <= Period, CLOSE, PREV + sc*(CLOSE - PREV))
```

Adaptive Trends And Oscillators by John Ehlers

H cycle count 1a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,6)>=360 AND Sum(value,5)<360 ,6,0) +
If(Sum(value,7)>=360 AND Sum(value,6)<360 ,7,0) +
If(Sum(value,8)>=360 AND Sum(value,7)<360 ,8,0) +
If(Sum(value,9)>=360 AND Sum(value,8)<360 ,9,0) +
If(Sum(value,10)>=360 AND Sum(value,9)<360 ,10,0) +
If(Sum(value,11)>=360 AND Sum(value,10)<360 ,11,0) +
If(Sum(value,12)>=360 AND Sum(value,11)<360 ,12,0) +
If(Sum(value,13)>=360 AND Sum(value,12)<360 ,13,0) +
```

```
If(Sum(value,14)>=360 AND Sum(value,13)<360 ,14,0) +
If(Sum(value,15)>=360 AND Sum(value,14)<360 ,15,0)
```

H cycle count 2a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,16)>=360 AND Sum(value,15)<360 ,16,0) +
If(Sum(value,17)>=360 AND Sum(value,16)<360 ,17,0) +
If(Sum(value,18)>=360 AND Sum(value,17)<360 ,18,0) +
If(Sum(value,19)>=360 AND Sum(value,18)<360 ,19,0) +
If(Sum(value,20)>=360 AND Sum(value,19)<360 ,20,0) +
If(Sum(value,21)>=360 AND Sum(value,20)<360 ,21,0) +
If(Sum(value,22)>=360 AND Sum(value,21)<360 ,22,0) +
If(Sum(value,23)>=360 AND Sum(value,22)<360 ,23,0) +
If(Sum(value,24)>=360 AND Sum(value,23)<360 ,24,0) +
If(Sum(value,25)>=360 AND Sum(value,24)<360 ,25,0)
```

H cycle count 3a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,26)>=360 AND Sum(value,25)<360 ,26,0) +
If(Sum(value,27)>=360 AND Sum(value,26)<360 ,27,0) +
If(Sum(value,28)>=360 AND Sum(value,27)<360 ,28,0) +
If(Sum(value,29)>=360 AND Sum(value,28)<360 ,29,0) +
If(Sum(value,30)>=360 AND Sum(value,29)<360 ,30,0) +
If(Sum(value,31)>=360 AND Sum(value,30)<360 ,31,0) +
If(Sum(value,32)>=360 AND Sum(value,31)<360 ,32,0) +
If(Sum(value,33)>=360 AND Sum(value,32)<360 ,33,0) +
If(Sum(value,34)>=360 AND Sum(value,33)<360 ,34,0) +
If(Sum(value,35)>=360 AND Sum(value,34)<360 ,35,0)
```

H ip sum 1

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
pr:=(H+L)/2;
(Cos(0)*pr)+
(Cos(360*(1/pd))*Ref(pr,-1))+
(Cos(360*(2/pd))*Ref(pr,-2))+
(Cos(360*(3/pd))*Ref(pr,-3))+
(Cos(360*(4/pd))*Ref(pr,-4))+
(Cos(360*(5/pd))*Ref(pr,-5))+
If(pd>6, Cos(360*(6/pd))*Ref(pr,-6), 0)+
If(pd>7, Cos(360*(7/pd))*Ref(pr,-7), 0)+
If(pd>8, Cos(360*(8/pd))*Ref(pr,-8), 0)+
If(pd>9, Cos(360*(9/pd))*Ref(pr,-9), 0)+
If(pd>10, Cos(360*(10/pd))*Ref(pr,-10), 0)+
If(pd>11, Cos(360*(11/pd))*Ref(pr,-11), 0)+
If(pd>12, Cos(360*(12/pd))*Ref(pr,-12), 0)+
If(pd>13, Cos(360*(13/pd))*Ref(pr,-13), 0)+
If(pd>14, Cos(360*(14/pd))*Ref(pr,-14), 0)
```

H ip sum 2

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
pr:=(H+L)/2;
If(pd>15, Cos(360*(15/pd))*Ref(pr,-15), 0)+
If(pd>16, Cos(360*(16/pd))*Ref(pr,-16), 0)+
If(pd>17, Cos(360*(17/pd))*Ref(pr,-17), 0)+
If(pd>18, Cos(360*(18/pd))*Ref(pr,-18), 0)+
If(pd>19, Cos(360*(19/pd))*Ref(pr,-19), 0)+
If(pd>20, Cos(360*(20/pd))*Ref(pr,-20), 0)+
If(pd>21, Cos(360*(21/pd))*Ref(pr,-21), 0)+
If(pd>22, Cos(360*(22/pd))*Ref(pr,-22), 0)+
If(pd>23, Cos(360*(23/pd))*Ref(pr,-23), 0)+
If(pd>24, Cos(360*(24/pd))*Ref(pr,-24), 0)
```

H ip sum 3

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
pr:=(H+L)/2;
If(pd>25, Cos(360*(25/pd))*Ref(pr,-25), 0)+
If(pd>26, Cos(360*(26/pd))*Ref(pr,-26), 0)+
If(pd>27, Cos(360*(27/pd))*Ref(pr,-27), 0)+
If(pd>28, Cos(360*(28/pd))*Ref(pr,-28), 0)+
If(pd>29, Cos(360*(29/pd))*Ref(pr,-29), 0)+
If(pd>30, Cos(360*(30/pd))*Ref(pr,-30), 0)+
If(pd>31, Cos(360*(31/pd))*Ref(pr,-31), 0)+
If(pd>32, Cos(360*(32/pd))*Ref(pr,-32), 0)+
If(pd>33, Cos(360*(33/pd))*Ref(pr,-33), 0)+
If(pd>34, Cos(360*(34/pd))*Ref(pr,-34), 0)
```

H rp sum 1

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
pr:=(H+L)/2;
(Sin(0)*pr)+
(Sin(360*(1/pd))*Ref(pr,-1))+
(Sin(360*(2/pd))*Ref(pr,-2))+
(Sin(360*(3/pd))*Ref(pr,-3))+
(Sin(360*(4/pd))*Ref(pr,-4))+
(Sin(360*(5/pd))*Ref(pr,-5))+
If(pd>6, Sin(360*(6/pd))*Ref(pr,-6), 0)+
If(pd>7, Sin(360*(7/pd))*Ref(pr,-7), 0)+
If(pd>8, Sin(360*(8/pd))*Ref(pr,-8), 0)+
If(pd>9, Sin(360*(9/pd))*Ref(pr,-9), 0)+
If(pd>10, Sin(360*(10/pd))*Ref(pr,-10), 0)+
If(pd>11, Sin(360*(11/pd))*Ref(pr,-11), 0)+
If(pd>12, Sin(360*(12/pd))*Ref(pr,-12), 0)+
```

```
If(pd>13, Sin(360*(13/pd))*Ref(pr,-13), 0)+
If(pd>14, Sin(360*(14/pd))*Ref(pr,-14), 0)
```

H rp sum 2

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
pr:=(H+L)/2;
If(pd>15, Sin(360*(15/pd))*Ref(pr,-15), 0)+
If(pd>16, Sin(360*(16/pd))*Ref(pr,-16), 0)+
If(pd>17, Sin(360*(17/pd))*Ref(pr,-17), 0)+
If(pd>18, Sin(360*(18/pd))*Ref(pr,-18), 0)+
If(pd>19, Sin(360*(19/pd))*Ref(pr,-19), 0)+
If(pd>20, Sin(360*(20/pd))*Ref(pr,-20), 0)+
If(pd>21, Sin(360*(21/pd))*Ref(pr,-21), 0)+
If(pd>22, Sin(360*(22/pd))*Ref(pr,-22), 0)+
If(pd>23, Sin(360*(23/pd))*Ref(pr,-23), 0)+
If(pd>24, Sin(360*(24/pd))*Ref(pr,-24), 0)
```

H rp sum 3

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
pr:=(H+L)/2;
If(pd>25, Sin(360*(25/pd))*Ref(pr,-25), 0)+
If(pd>26, Sin(360*(26/pd))*Ref(pr,-26), 0)+
If(pd>27, Sin(360*(27/pd))*Ref(pr,-27), 0)+
If(pd>28, Sin(360*(28/pd))*Ref(pr,-28), 0)+
If(pd>29, Sin(360*(29/pd))*Ref(pr,-29), 0)+
If(pd>30, Sin(360*(30/pd))*Ref(pr,-30), 0)+
If(pd>31, Sin(360*(31/pd))*Ref(pr,-31), 0)+
If(pd>32, Sin(360*(32/pd))*Ref(pr,-32), 0)+
If(pd>33, Sin(360*(33/pd))*Ref(pr,-33), 0)+
If(pd>34, Sin(360*(34/pd))*Ref(pr,-34), 0)
```

H TL sum 1

```
value:=Int(Fml("Hilbert cycle period - final-a"));
If(value=6, Mov((H+L)/2,8,S),0) +
If(value=7, Mov((H+L)/2,9,S),0) +
If(value=8, Mov((H+L)/2,10,S),0) +
If(value=9, Mov((H+L)/2,11,S),0) +
If(value=10, Mov((H+L)/2,12,S),0) +
If(value=11, Mov((H+L)/2,13,S),0) +
If(value=12, Mov((H+L)/2,14,S),0) +
If(value=13, Mov((H+L)/2,15,S),0) +
If(value=14, Mov((H+L)/2,16,S),0) +
If(value=15, Mov((H+L)/2,17,S),0)
```

H TL sum 2

```
value:=Int(Fml("Hilbert cycle period - final-a"));
If(value=16, Mov((H+L)/2,18,S),0) +
If(value=17, Mov((H+L)/2,19,S),0) +
If(value=18, Mov((H+L)/2,20,S),0) +
If(value=19, Mov((H+L)/2,21,S),0) +
If(value=20, Mov((H+L)/2,22,S),0) +
If(value=21, Mov((H+L)/2,23,S),0) +
If(value=22, Mov((H+L)/2,24,S),0) +
If(value=23, Mov((H+L)/2,25,S),0) +
If(value=24, Mov((H+L)/2,26,S),0) +
If(value=25, Mov((H+L)/2,27,S),0)
```

H TL sum 3

```
value:=Int(Fml("Hilbert cycle period - final-a"));
If(value=26, Mov((H+L)/2,28,S),0) +
If(value=27, Mov((H+L)/2,29,S),0) +
If(value=28, Mov((H+L)/2,30,S),0) +
If(value=29, Mov((H+L)/2,31,S),0) +
If(value=30, Mov((H+L)/2,32,S),0) +
If(value=31, Mov((H+L)/2,33,S),0) +
If(value=32, Mov((H+L)/2,34,S),0) +
If(value=33, Mov((H+L)/2,35,S),0) +
If(value=34, Mov((H+L)/2,36,S),0) +
If(value=35, Mov((H+L)/2,37,S),0)
```

Hilbert cycle period - 1a

```
value1:=((H+L)/2) - Ref(((H+L)/2),-6);
value2:= Ref(value1,-3);
value3:=0.75*(value1-Ref(value1,-6)) + 0.25*(Ref(value1,-2)-Ref(value1,-4));
inphase:= 0.33 * value2 + (0.67 * PREV);
quad:= 0.2 * value3 + ( 0.8 * PREV);
p1:=Atan(Abs(quad+Ref(quad,-1)),Abs(inphase+Ref(inphase,-1)));
phase:=If(inphase<0 AND quad>0, 180-p1,
If(inphase<0 AND quad<0, 180+p1,
If(inphase>0 AND quad<0, 360-p1,p1)));
dp:=If(Ref(phase,-1)<90 AND phase>270, 360+Ref(phase,-1)-phase,Ref(phase,-1)-phase);
dp2:=If(dp < 1, 1,
If(dp > 60, 60, dp));
dp2
```

Hilbert cycle period - final-a

```
c1:=Fml( "H cycle count 1a") + Fml( "H cycle count 2a") + Fml( "H cycle count 3a") ;
c2:=If(c1=0,PREV,c1);
(0.25*c2) + (0.75*PREV)
```

Instantaneous Trend Line

```
pr:=(H+L)/2;
(Fml("H TL sum 1") + Fml("H TL sum 2") + Fml("H TL sum 3"));
0.33*(pr + (0.5*(pr-Ref(pr,-3)))) + (0.67*PREV)
```

Sinewave Indicator

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
cp:=Fml("Hilbert cycle period - final-a");
ip:=Fml( "H ip sum 1") + Fml( "H ip sum 2") + Fml( "H ip sum 3");
rp:=Fml( "H rp sum 1") + Fml( "H rp sum 2") + Fml( "H rp sum 3");
dc1:=If(Abs(ip)>0.001, Atan(rp/ip,1), 90*If(rp>=0,1,-1));
dc2:=If(pd<30 AND cp>0,dc1+((6.818/cp - 0.227)*360),dc1);
dc3:=If(ip<0, dc2+270, dc2+90);
dcp:=If(dc3>315, dc3-360, dc3);
Sin(dcp);
Sin(dcp+45)
```

AdjustableTrading Bands by Tushar Chande
Adjustable Trading Bands

```
{Upper Band}
Prd1a:=Input("ATR Period",5,20,5);
Prd2a:=Input("Period for Highest High Value",5,20,10);
(HHV(LLV(L,Prd1a)+ATR(Prd1a),Prd2a));
{Lower Band}
Prd2b:=Input("Period for Lowest Low Value",5,20,10);
(LLV(HHV(H,Prd1a)-ATR(Prd1a),Prd2b));
```

Advance/Decline Divergence Oscillator

```
cv:= Input("Time Periods of TSF  -",5,100,14);
((CLOSE - TSF(CLOSE, cv))/ TSF(CLOSE, cv)* 100)
```

A/D Line - Adaptative -> %A - %D

```
(( Security("X.WSE-A",O) * 100) /
(Security("X.WSE-A",O) + Security("X.WSE-D",O) ) ) -
(( Security("X.WSE-D",O) * 100) /
(Security("X.WSE-A",O) + Security("X.WSE-D",O) ) )
+ PREV
```

A/D Line - Adaptative -> [%A/%U] - [%D/%U]

```
AU:=( Security("X.WSE-A",O) / Security("X.WSE-U",O) ) * 100 ;
DU:=( Security("X.WSE-D",O) / Security("X.WSE-U",O) ) * 100 ;
( AU - DU ) + PREV
```

Advance/DeclineLine with Negative Volume
The following steps will get you an advance-decline line with negative volume where applicable. Follow these steps once and save as a CHART. When you want to use itsimply load the chart and the program
will calculate the new volume plot using the new data.

- Create a NEW chart of the advancing issues.
- Create a NEW chart of the declining issues.
- Create a NEW chart of the advance-decline composite.
- Create a NEW INNER WINDOW on the declining issues chart.
- Delete the volume plot on the advance-decline composite chart.
- Copy the volume from the advancing issues chart and paste it into the newinner window on the declining issues chart.
- Drop the custom formula, P-V on the advancing volume plot in the decliningissues chart, creating a new scale.
- Copy that plot to the empty inner window (where the volume was) of theadvance-decline composite.
- Save that chart as the adv-decl chart (perhaps advdecl.mwc).

This will be the chart you load to do your study of the advance-declineline with negative volume.

Advance/ Decline Line - New by Daniel E. Downing

Advance/ Decline Line - New by Daniel E. Downing

Advance / Decline Line - New - NYSE

```
Cum(
If(Security("X.NYSE-A",O),>=,1000,
If(Security("X.NYSE-D",O),<,1000,+1,0),
If(Security("X.NYSE-D",O),>=,1000,-1,0)))
```

Advance/Decline Divergence Oscillator

```
cv:= Input("Time Periods of TSF  -",5,100,14);
((CLOSE - TSF(CLOSE, cv))/ TSF(CLOSE, cv)* 100)
```

ADX/ADXR Custom (Without Rounding)
ADX Custom

```
Periods:=Input("Time Periods",1,100,14);
PlusDM:=If(H>Ref(H,-1) AND L>=Ref(L,-1), H-Ref(H,-1),If(H>Ref(H,-1)
AND L<Ref(L,-1) AND H-Ref(H,-1) > Ref(L,-1)-L, H-Ref(H,-1),0));
PlusDI:=100*Wilders(PlusDM,Periods)/ATR(Periods);
MinusDM:=If(L<Ref(L,-1) AND H<=Ref(H,-1),Ref(L,-1)-L,If(H>Ref(H,-1)
AND L<Ref(L,-1) AND H-Ref(H,-1)<Ref(L,-1)-L, Ref(L,-1)-L,0));
MinusDI:=100*Wilders(MinusDM,Periods)/ATR(Periods);
DIDif:=Abs(PlusDI-MinusDI);
DISum:=PlusDI+MinusDI;
ADXFinal:=100*Wilders(DIDif/DISum,Periods);
ADXFinal
```

ADX - Above

```
ABOVE:=ADX(14)>Mov(ADX(14),5,S);
Sum(ABOVE,20)=20;
```

ADX RAW

```
Periods:= Input("Enter time periods",1,100,14);
PlusDM:= If(HIGH>Ref(HIGH,-1) AND
LOW>=Ref(LOW,-1), HIGH-Ref(HIGH,-1),
If(HIGH>Ref(HIGH,-1) AND LOW<Ref(LOW,-1)
AND HIGH-Ref(HIGH,-1)>Ref(LOW,-1)-LOW,
HIGH-Ref(HIGH,-1), 0));
DIPlus:= 100 * Wilders(PlusDM,Periods) /
ATR(Periods);
MinusDM:= If(LOW<Ref(LOW,-1) AND
HIGH<=Ref(HIGH,-1), Ref(LOW,-1)-LOW,
If(HIGH>Ref(HIGH,-1) AND LOW<Ref(LOW,-1)
AND HIGH-Ref(HIGH,-1)<Ref(LOW,-1)-LOW,
Ref(LOW,-1)-LOW, 0));
DIMinus:= 100 * Wilders(MinusDM,Periods) /
ATR(Periods);
DIDif:= Abs(DIPlus - DIMinus);
DISum:= DIPlus + DIMinus;
ADXRaw:= 100 * Wilders(DIDif/DISum, Periods);
ADXRaw
```

Alligator Indicators by Bill Williams
Chaos Blue

```
{Alligator Blue Balance Line - Jaw }
{13 bar smoothed average offset 8 bars }
Ref(Wilders(MP(),13),-8);
```

Chaos Red

```
{Alligator Red Balance Line - Teeth}
```

```
{8 bar smoothed average offset 5 bars}
Ref(Wilders(MP(),8),-5);
```

Chaos Green

```
{Alligator Green Balance Line - Lip }
{5 bar smoothed average offset 3 bars }
Ref(Wilders(MP(),5),-3);
```

Chaos Gator

```
{ Chaos Alligator }
{ Plot as histogram }

green := Fml("Chaos Green");
red := Fml("Chaos Red");
blue := Fml("Chaos Blue");

If(green > red AND red > blue, green - blue,
If(blue > red AND red > green, green - blue, 0));
```

Chaos AO

```
{ Chaos Awsome Oscillator - measures momentum }
( A very close approximation of MFI }
{ Plot as histogram }

Mov(MP(),5,S) - Mov(MP(),34,S);
```

Chaos AO Signal Line

```
{ Chaos Awsome Oscillator Signal Line }
{ Plot as line over AO histogram }
Mov(Mov(MP(),5,S) - Mov(MP(),34,S),5,S)
```

Chaos AC

```
{ Chaos Accelerator/Decelerator Oscillator }
{ Measures acceleration }
{ Plot as histogram }

Fml("Chaos AO") - Mov(Fml("Chaos AO"),5,S);
```

Chaos Fractal

```
{ Chaos Fractal (simple version +1=Up, -1=Dn) }
```

```
High1 := Ref(HIGH,-2);
High2 := Ref(HIGH,-1);
High3 := Ref(HIGH,0);
High4 := Ref(HIGH,1);
High5 := Ref(HIGH,2);
Low1 := Ref(LOW,-2);
Low2 := Ref(LOW,-1);
Low3 := Ref(LOW,0);
Low4 := Ref(LOW,1);
Low5 := Ref(LOW,2);
Fractal := If((High3 > High1)
AND (High3 > High2)
AND(High3 > High4)
AND (High3 > High5), +1,0);

Fractal := If((Low3 < Low1)
AND (Low3 < Low2)
AND(Low3 < Low4)
AND (Low3 < Low5),
If(Fractal > 0, 0, -1), Fractal);

Fractal;
```

Almost Zero Lag Moving Average

```
Period:= Input("What Period",1,250,10);
EMA1:= Mov(P,Period,E);
EMA2:= Mov(EMA1,Period,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA:= EMA1 + Difference;
ZeroLagEMA
```

Alpha

```
( Sum( ROC( CLOSE ,1 ,% ) ,21 ) - ( Fml( "Beta" ) * Sum( ROC( INDICATOR,1,%) ,21 ) ) ) / 21
```

Beta

```
( ( 21 * Sum( ROC( CLOSE ,1 ,% ) * ROC( INDICATOR ,1 ,% ) ,21 ) ) -
( Sum( ROC( CLOSE ,1 ,% ) ,21) * Sum( ROC( INDICATOR ,1 ,% ) ,21 ) ) ) /
( (21 * Sum( Pwr( ROC( INDICATOR ,1 ,% ) ,2 ) ,21 )) - Pwr( Sum( ROC( INDICATOR ,1 ,% ) ,
21 ) ,2 ))
```

AMA Binary Wave

```
Periods:=Input("Time Periods",1,1000,10);
Direction:=CLOSE-Ref(CLOSE,-periods);
Volatility:=Sum(Abs(ROC(CLOSE,1,$)),periods);
ER:=Abs(Direction/Volatility);
```

```
FastSC:=2/(2+1);
SlowSC:=2/(30+1);
SSC:=ER*(FastSC-SlowSC)+SlowSC;
Constant:=Pwr(SSC,2);
AMA:=If(Cum(1)=periods+1,Ref(CLOSE,-1) +
constant*(CLOSE-Ref(CLOSE,-1)),PREV +
constant*(CLOSE-PREV));
FilterPercent:=Input("Filter Percentage",0,100,15)/100;
Filter:=FilterPercent*Std(AMA-Ref(AMA,-1),Periods);
AMALow:=If(AMA<Ref(AMA,-1),AMA,PREV);
AMAHigh:=If(AMA>Ref(AMA,-1),AMA,PREV);
If(AMA-AMALow>Filter,1{Buy Signal},
If(AMAHigh-AMA>Filter,-1{Sell Signal},0{No_Signal}))
```

Anchored Momentum
Anchored Momentum - General w/ Exponential Smoothing

```
MomPer := Input("Momentum Periods",1,1000,10);
SmaPer := Input("Simple Moving Average Periods",1,1000,7);
EmaPer := Input("Exponential Moving AveragePeriods",1,1000,7);
100 * ((Mov(CLOSE, EMAPer, E) /
Ref(Mov(CLOSE,SmaPer,S), ((SmaPer - 1)/2) - MomPer)) - 1)
```

Anchored Momentum - General

```
MomPer := Input("Momentum Periods",1,1000,10);
SmaPer := Input("Simple Moving Average Periods",1,1000,7);
100 * ((CLOSE / Ref(Mov(CLOSE, SmaPer, S),((SmaPer- 1)/2) - MomPer)) - 1)
```

Anchored Momentum - Most w/ Exponential Smoothing

```
MomPer := Input("Momentum Periods",1,1000,10);
SmaPer := Input("Simple Moving Average Periods",1,1000,7);
EmaPer := Input("Exponential Moving AveragePeriods",1,1000,7);
100 * ((Mov(CLOSE, EmaPer, E) / Mov(CLOSE,(2 * MomPer)+ 1, S) )- 1)
```

Anchored Momentum - Most

```
MomPer := Input("Momentum Periods",1,1000,10);
SmaPer := Input("Moving Average Periods",1,1000,7);
100 * ((CLOSE / Mov(CLOSE, (2 * MomPer) +1, S) )- 1)
```

Anchored Moving Average by Rakesh Sahgal

Anchored Moving Average

```
eMonth:=Input("Enter the Month - MM",1,12,1);
eDate:=Input("Enter the Date - DD",1,31,2);
eYear:=Input("Enter the Year - YYYY",1900,2100,2001);
numdays:=BarsSince(DayOfMonth()=eDate AND
```

```
Month() =eMonth AND Year()=eYear);

cumtp:=Cum(Typical());
basecumtp:= ValueWhen(1, numdays=1, Ref(cumtp,-1));
avgval:=(cumtp-basecumtp)/numdays;
avgval;
```

Another LRS-ROC Indicator

```
Lb:=Input("Look-Back Periods?",3,100,13);
ROC( LinRegSlope(C,Lb),Lb,$)
```

Anti Trigger by L. B. Raschke
Anti Trigger

```
{THE FORMULA (+REQUIRED FUNCTIONS) FOR THE ANTI TRIGGER INDICATOR}
AT0SETBARS:=3;
AT0FF:=Stoch(7,AT0SETBARS);
AT0SS:=Mov(Stoch(7,AT0SETBARS),10,E);
AT0ENTRYADD:=+1;
AT0EXITADD:=+1;
AT0CSELL:={use in expadv or systest}{for RTdel the REF-function}
If(AT0FF>Ref(AT0FF,-1) AND AT0SS<Ref(AT0SS,-1),C+1,0);
AT0CBUY:={use in expadv or systest}{for RTdel the REF-function}
If(AT0FF<Ref(AT0FF,-1) AND AT0SS>Ref(AT0SS,-1),C+1,0);
AT0BBUY:={use in expadv or systest}{for RTdel the REF-function}
If(AT0CBUY>AT0SETBARS,H+AT0ENTRYADD,99999);
AT0SSELL:={use in expadv or systest}{for RTdel the REF-function}
If(AT0CSELL>AT0SETBARS,L-AT0ENTRYADD,0);
AT0MP:={use in expadv or systest}If(AT0BBUY<99999,-1,If(AT0SSELL>0,1,0));
{AT0LXSTOP:=}{use in expadv or systest}{forRT del the REF-function}
{IF(REF(AT0MP,-1)<1 OR (REF(AT0BBUY,-1)<99999AND
H>REF(AT0BBUY,-1)), L-AT0EXITADD,0);}
{AT0SXSTOP:=}{use in expadv or systest}{forRT del the REF-function}
{IF(REF(AT0MP,-1)>-1 OR (REF(AT0SSELL,-1)>0AND
L<REF(AT0SSELL,-1)), H+AT0EXITADD,0);}
AT0MP
```

Arms Ease of Movement - Normalized

```
Mov(((
((H+L)/2)-Ref(((H+L)/2),-1))/
((H+L)/2)*100/(((V-Mov(V,30,S))/Mov(V,30,S))/
((H+L)/2))/Mov(((H+L)/2),30,S)*100),13,E)
```

Arms Ease of Movement

emv(PERIODS, METHOD)

ARMS Index (TRIN)
ARMS Index - NYSE

```
(( Security("X.NYSE-A",O) ) / ( Security("X.NYSE-D",O) )) /
(( Security("X.NYSE-A",V) ) / ( Security("X.NYSE-D",V) ))
```

ARMS (Open) Index

```
xxx:= Input("Długość średniej  -",1,500,10);

( Mov( (Security("X.WSE-A",O)),xxx,S)  /
  Mov( (Security("X.WSE-D",O)),xxx,S)) /
( Mov( (Security("X.WSE-A",V)),xxx,S)  /
  Mov( (Security("X.WSE-D",V)),xxx,S))
```

Aroon Indicators by Tushar Chande

Aroon Down

```
100* (14 - (( If(Ref(L,-1) = LLV( L ,14 ) ,1,
If( Ref(L ,-2 ) = LLV( L,14 ) ,2 , If( Ref(L ,- 3 ) =
LLV( L,14 ) ,3 ,If( Ref(L ,-4 ) = LLV( L ,14) ,4 ,
If(Ref( L ,-5 ) = LLV( L ,14 ) ,5 ,If(Ref(L ,-6 ) =
LLV( L,14 ) ,6 ,If( Ref(L ,-7 ) = LLV( L,14) ,7 ,
If(Ref( L ,-8 ) = LLV( L ,14 ) ,8 ,If(Ref( L ,-9 ) =
LLV( L,14 ) ,9 ,If( Ref(L,-10) = LLV(L,14) ,10 ,
If(Ref(L ,-11) = LLV( L,14 ) ,11 ,If(Ref(L,-12 ) =
LLV(L ,14) ,12,If( Ref(L,-13) = LLV(L ,14) ,13 ,
If( Ref( L,-14) = LLV( L,14 ) ,14 ,0) ) ) ) ) ) ) ) ) ) ) ) ) )) ) ) / 14
```

Aroon Up

```
100 * ( 14 - ( ( If(Ref(H ,-1) = HHV(H ,14) ,1 ,
If(Ref(H ,-2 ) = HHV(H ,14 ) ,2 ,If(Ref(H ,- 3 ) =
HHV(H ,14 ) ,3, If(Ref(H ,-4 ) = HHV(H ,14) ,4 ,
If(Ref(H ,-5 ) = HHV(H ,14 ) ,5 ,If(Ref(H ,-6 ) =
HHV(H ,14 ) ,6 ,If(Ref(H,-7 ) = HHV(H ,14) ,7 ,
If(Ref(H ,-8 ) = HHV(H ,14) ,8 , If(Ref(H ,-9 ) =
HHV(H ,14) ,9 ,If(Ref(H ,-10 ) = HHV(H ,14) ,10 ,
If(Ref(H ,-11 ) = HHV(H ,14) ,11 ,If(Ref(H ,-12 ) =
HHV(H ,14) ,12 ,If(Ref(H ,-13) = HHV(H ,14) ,13 ,
If(Ref(H ,-14 ) = HHV(H ,14 ) ,14 ,0 ) ) ) ) ) ) ) ) ) ) ) ) ) )) ) ) / 14
```

Aroon Oscillator

```
OKRES:=Input("okres",2,100,14);
aroonupc:=((okres-HHVBars(H,okres+1))/okres)*100;
aroondownc:=((okres-LLVBars(L,okres+1))/okres)*100;
aroonosc:=aroonupc-aroondownc;
aroonosc
```

ATR Bands

```
stdha := Mov(C,20,E)+2*(ATR(20));
stdla := Mov(C,20,E)-2*(ATR(20));
stdha;
stdla
```

ATR Custom Indicator

```
periods:=Input("ATR Periods?",1,100,10);
TH:=If(Ref(C,-1) > H,Ref(C,-1),H);
TL:=If(Ref(C,-1) < L,Ref(C,-1),L);
TR:=TH-TL;
Wilders(TR,periods)
```

ATR (mine) I

```
prd1:=input("enter ATR period",1,9999,7);
prd2:=(prd1*2)-1;
{max (absolute) of yesterday's close to today's high or today's low}
myatr1:=Max(Abs(Ref(C,-1)-H),Abs(Ref(C,-1)-L));
{max of yesterday's close to today's high or today's low or today's range}
myatr2:=Max(myatr1,H-L);
myatr2
```

ATR (mine) II

```
(H - L + Abs(H - Ref(C,-1)) + Abs(L - Ref(C,-1)) )/2
```

ATR Exit 1

```
dataarray:=Input("Data array. Enter a number 1=o, 2=h, 3=l, 4=c",1,4,2);
value2:=If(dataarray=1,O,If(dataarray=2,H,If(dataarray=3,L,If(dataarray=4,C,C))));
multiplier:= Input("Enter ATR multiplier ",1,10,3);
atrperiods:= Input("Enter ATR periods",1,39,5);
HHV(value2 - multiplier*ATR(atrperiods),10)
```

ATR Exit 2

```
Numatr:=Input("Multiples of ATR",1,5,2);
Periods:=Input("Periods for ATR",3,21,8);
Lookback:=Input("lookback periods",3,55,8);
SL:=C-Numatr*ATR(periods);
If(SL<HHV(SL,lookback),PREV,SL)
```

ATR Modified

```
prd1:=input("Enter ATR Period",1,9999,7);
prd2:=(prd1*2)-1;
{max (absolute) of yesterday's close to today'shigh or today's low}
myatr1:=Max(Abs(Ref(C,-1)-H),Abs(Ref(C,-1)-L));
{max of yesterday's close to today's highor today's low or today's range}
myatr2:=Max(myatr1,H-L);
```

ATR Ratio

```
atr(10)/atr(50)/100
```

ATR Ratio to Close

```
ATRR:= ATR(5)/C;
MATRR:=Mov(ATRR,3,E);
ATRR;
MATRR;
```

ATR Trailing Stop Loss I

```
HHV(H - 2.5*ATR(5),10);
LLV(L + 2.5*ATR(5),10);
```

Automatic Metastock Trendline Formula

```
Trough(1,L,10) + ((((Trough(1,L,10)-Trough(2,L,10)) /
(TroughBars(2,L,10)-TroughBars(1,L,10))) * TroughBars(1,L,10)))
```

Automatic Support and Resistance System by Mel Widner

S1

```
IF(Ref(LOW,-4)=LLV(LOW,9),Ref(LOW,-4),PREVIOUS)
```

S2

```
IF(Fml("S1")=Ref(Fml("S1"),-1),PREVIOUS,Ref(Fml("S1"),-1))
```

S3

```
IF(Fml("S1")=Ref(Fml("S1"),-1),PREVIOUS,Ref(Fml("S2"),-1))
```

S4

```
IF(Fml("S1")=Ref(Fml("S1"),-1),PREVIOUS,Ref(Fml("S3"),-1))
```

S5

```
IF(Fml("S1")=Ref(Fml("S1"),-1),PREVIOUS,Ref(Fml("S4"),-1))
```

S6
IF(Fml("S1")=Ref(Fml("S1"),-1),PREVIOUS,Ref(Fml("S5"),-1))

WSO
100*(1(
Int(Fml("S1")/CLOSE) + Int(Fml("S2")/CLOSE) +
Int(Fml("S3")/CLOSE) + Int(Fml("S4")/CLOSE) +
Int(Fml("S5")/CLOSE) + Int(Fml("S6")/CLOSE)) / 6)

R1
IF(Ref(HIGH,-4)=HHV(HIGH,9),Ref(HIGH,-4),PREVIOUS)

R2
IF(Fml("R1")=Ref(Fml("R1"),-1),PREVIOUS,Ref(Fml("R1"),-1))

R3
IF(Fml("R1")=Ref(Fml("R1"),-1),PREVIOUS,Ref(Fml("R2"),-1))

R4
IF(Fml("R1")=Ref(Fml("R1"),-1),PREVIOUS,Ref(Fml("R3"),-1))

R5
IF(Fml("R1")=Ref(Fml("R1"),-1),PREVIOUS,Ref(Fml("R4"),-1))

R6
IF(Fml("R1")=Ref(Fml("R1"),-1),PREVIOUS,Ref(Fml("R5"),-1))

WRO
100*(1-(
Int(Fml("R1")/CLOSE) + Int(Fml("R2")/CLOSE) +
Int(Fml("R3")/CLOSE) + Int(Fml("R4")/CLOSE) +
Int(Fml("R5")/CLOSE) + Int(Fml("R6")/CLOSE)) / 6)

Average Dollar Price Volatility Indicator

(H - L +
(Ref(H,-1) - Ref(L,-1)) +
(Ref(H,-2) - Ref(L,-2)) +
(Ref(H,-3) - Ref(L,-3)) +
(Ref(H,-4) - Ref(L,-4))) / 5

Average Volume

```
xxx:= Input("Periods",1,200,5);
Mov(V,xxx,S)
```

Average of Multiple Moving Averages

```
DN:=1;
HN:=2;
HN3:=DN+HN;
HN4:=HN+HN;
HN5:=HN+HN+DN;
HN6:=HN+HN+HN;
HN7:=HN+HN+HN+DN;
n:=50;
sOne:=((n-DN)/HN)*C+
((n-HN3)/HN)*Ref(C,-DN)+
((n-HN5)/HN)*Ref(C,-HN)+
((n-HN7)/HN)*Ref(C,-HN3)+
((n-(HN7+HN))/HN)*Ref(C,-HN4)+
((n-(HN7+HN4))/HN)*Ref(C,-HN5)+
((n-(HN7+HN6))/HN)*Ref(C,-HN6)+
((n-(HN5*HN3))/HN)*Ref(C,-HN7)+
((n-(HN5*HN3+HN)/HN)*Ref(C,-HN*HN4)+
((n-(HN5*HN3+HN4))/HN)*Ref(C,-HN3*HN3)+
((n-(HN5*HN4+DN))/HN)*Ref(C,-HN*HN5)+
((n-(HN5*HN4+HN3))/HN)*Ref(C,-HN*HN5+DN)+
((n-(HN5*HN5))/HN)*Ref(C,-HN3*HN4)+
((n-(HN5*HN5+HN))/HN)*Ref(C,-HN3*HN4+DN)+
((n-29)/HN)*Ref(C,-HN3*HN4+HN)+
((n-31)/HN)*Ref(C,-HN3*HN5)+
((n-33)/HN)*Ref(C,-HN3*HN5+DN)+
((n-35)/HN)*Ref(C,-HN3*HN5+HN)+
((n-37)/HN)*Ref(C,-HN3*HN6)+
((n-39)/HN)*Ref(C,-HN3*HN6+DN)+
((n-41)/HN)*Ref(C,-HN4*HN5)+
((n-43)/HN)*Ref(C,-HN4*HN5+DN)+
((n-45)/HN)*Ref(C,-HN4*HN5+HN)+
((n-47)/HN)*Ref(C,-HN4*HN5+HN3)+
((n-49)/HN)*Ref(C,-HN4*HN6)+
((n-51)/HN)*Ref(C,-HN5*HN5)+
((n-53)/HN)*Ref(C,-HN5*HN5+DN)+
((n-55)/HN)*Ref(C,-HN5*HN5+HN)+
((n-57)/HN)*Ref(C,-HN4*HN7)+
((n-59)/HN)*Ref(C,-HN4*HN7+DN)+
((n-61)/HN)*Ref(C,-HN6*HN5)+
((n-63)/HN)*Ref(C,-HN6*HN5+DN)+
((n-65)/HN)*Ref(C,-HN6*HN5+HN)+
((n-67)/HN)*Ref(C,-HN6*HN5+HN3)+
((n-69)/HN)*Ref(C,-HN6*HN5+HN4)+
((n-71)/HN)*Ref(C,-HN5*HN7)+
((n-73)/HN)*Ref(C,-HN6*HN6)+
((n-75)/HN)*Ref(C,-HN6*HN6+DN)+
((n-77)/HN)*Ref(C,-HN6*HN6+HN)+
```

```
((n-79)/HN)*Ref(C,-HN6*HN6+HN3)+
((n-81)/HN)*Ref(C,-HN6*HN6+HN4)+
((n-83)/HN)*Ref(C,-HN6*HN6+HN5)+
((n-85)/HN)*Ref(C,-HN7*HN6)+
((n-87)/HN)*Ref(C,-HN7*HN6+DN)+
((n-89)/HN)*Ref(C,-HN7*HN6+HN)+
((n-91)/HN)*Ref(C,-HN7*HN6+HN3)+
((n-93)/HN)*Ref(C,-HN7*HN6+HN4)+
((n-95)/HN)*Ref(C,-HN7*HN6+HN5)+
((n-97)/HN)*Ref(C,-HN7*HN6+HN6)+
((n-99)/HN)*Ref(C,-HN7*HN7));
TN:=Mov(C,n,S);
yTwo:=TN+(HN6*sOne)/((n+DN)*n);
yTwo
```

Average - Modified Method

```
Day:=Cum(1)+1;
Z:=Input("Periods",2,1000,5);
MV:=(1/Z);
If(Day<(Z+2),C,If(day=(Z+2),Mov(C,LastValue(Z),S),PREV+(MV*(C-PREV))))
```

Balance Of Power - BOP

```
THL:=If(H-L=0,.00001,H-L);
{Reward Based on the Open}

BuRBoO:=(H-O)/(THL);
BeRBoO:=(O-L)/(THL);
{Reward Based on the Close}

BuRBoC:=(C-L)/(THL);
BeRBoC:=(H-C)/(THL);
{Reward Based on the Open-Close}

BuRBoOC:=If(C>O,(C-O)/(THL),0);
BeRBoOC:=If(C>O,0,(O-C)/(THL));
BOP:=(BuRBoO+BuRBoC+BuRBoOC)/3 - (BeRBoO+BeRBoC+BeRBoOC)/3;
BOP
```

BarNumber of .....

BarNumber of Trade Entry day -.382 Fib .75 pts Zig

```
a:=If((Peak(1,Zig(H,.75,$),.1) >
   (Peak(2,Zig(H,.75,$),.1))),1,0);{This sort
   of defines an UPtrend, so you're only
   looking to BUY dips [retracements].}
b:= (Peak(1,Zig(H,.75,$),.1) -
```

```
   Trough(1,Zig(L,.75,$),.1)) * .618{.618
   will plot a .382 line one the chart}  +
   Trough(1,Zig(L,.75,$),.1);
x:=If(a=1,Cum(H),0);{This plots a 1 ONLY when
    "a" is true, otherwise it plots zero. It simply
      counts all the bars (highs) loaded in chart.}
j:= a=1 AND H < (Peak(1,Zig(H,.75,$),.1))
  AND x > 0 AND Cross(b,L);
BarNumber:= If(1>0,Cum(1),Cum(1));
k:= If(j,BarNumber,0);
k
```

BarNumber of Peaks (.75 pts Zig)

```
BarNumber:=If(1 > 0,Cum(1),Cum(1));
r:= If(Zig(H,.75,$) > Ref(Zig(H,.75,$),-1) AND
Zig(H,.75,$) > Ref(Zig(H,.75,$),1),H,0);
q:= If(r,BarNumber,0);
q
```

BarNumber of Troughs (.75 pts Zig)

```
BarNumber:=If(1 > 0, Cum(1),Cum(1));
q:= If(Zig(L,.75,$) < Ref(Zig(L,.75,$),-1) AND
Zig(L,.75,$) < Ref(Zig(L,.75,$),1),L,0);
r:= If(q,BarNumber,0);
r
```

FIB Level .75 pts (.382%)

```
a:= (Peak(1,Zig(H,.75,$),.1) - Trough(1,Zig(L,.75,$),.1)) *
.618{.618 will plot a .382 line on the chart} + Trough(1,Zig(L,.75,$),.1);
a
```

System Test

FIB Retracement .382 Fib .75 pts Zig YES

```
a:=
Fml("BarNumber of Trade Entry day -.382 Fib .75 pts Zig");

b:=
If(Fml("BarNumber of Peaks (.75 pts Zig)")>0,
Fml("BarNumber of Peaks (.75 pts Zig)"),PREV);

d:=
If(Fml("BarNumber of Troughs (.75 pts Zig)")>0,
Fml("BarNumber of Troughs (.75 pts Zig)"),PREV);
```

```
If(a>0 AND b>d ,1,0)
```

Base

```
If(Cum(1)<=31,1,(((Stdev(C,30)-Ref(Stdev(C,30),-1))/Stdev(C,30))+1)*PREV)
```

Base Channel

```
{Formula1}
Ref(HHV(H,20) + Fml("BaseC"),-1);
{Formula2}
Ref(LLV(L,20) - Fml("BaseC"),-1)
```

Bell Ringer's StochRSI 14

```
(Sum(RSI(14)-LLV(RSI(14),14),3)/Sum(HHV(RSI(14),14)-LLV(RSI(14),14),3))*100
```

Beta II

```
(( 21 * Sum( ROC( CLOSE ,1 ,% ) *
ROC( Security( "WIG",C),1 ,% ) ,21 ) ) -
( Sum( ROC( CLOSE ,1 ,% ) ,21) *
Sum( ROC( Security( "WIG",C) ,1 ,% ) ,21 ) ) ) /
( (21 * Sum( Pwr( ROC( Security( "WIG",C) ,1 ,% ) ,2 ) ,21 )) - Pwr( Sum( ROC( Security( "WIG",C)
,1 ,% ) ,21 ) ,2 ))
```

Better Bollinger Bands I

```
pds:=Input("Periods",2,200,20);
sd:=Input("Standard Deviations",.01,10,2);
alpha:=2/(pds+1);
mt:=alpha*C+(1-alpha)*(If(Cum(1)<pds,C,PREV));
ut:=alpha*mt+(1-alpha)*(If(Cum(1)<pds,C,PREV));
dt:=((2-alpha)*mt-ut)/(1-alpha);
mt2:=alpha*Abs(C-dt)+(1-alpha)*PREV;
ut2:=alpha*mt2+(1-alpha)*PREV;
dt2:=((2-alpha)*mt2-ut2)/(1-alpha);
but:=dt+sd*dt2;
blt:=dt-sd*dt2;
dt;
but;
blt
```

Binary Wave #1 #2 #3 #4 and Composite Wave

Binary Wave #1 20-unit m.a.

```
If(C > Mov(C,20,E), {bullish} +1, {bearish}-1)
```

Binary Wave #2 MACD/trigger
If(MACD() > Mov(MACD(),9,E), {bullish} +1,{bearish} -1)

Binary Wave #3 12-ROC price
If(ROC(C,12,%) > 0, {bullish} +1, {bearish}-1)

Binary Wave #4 5-Stochastic
If(Stoch(5,3) > 50, {bullish} +1, {bearish}-1)

Binary Wave All Composite Wave
```
( If(C > Mov(C,20,E), {bullish} +1, {bearish}-1)  ) +
( If(MACD() > Mov(MACD(),9,E), {bullish} +1,{bearish} -1) ) +
( If(ROC(C,12,%) > 0, {bullish} +1, {bearish}-1) ) +
( If(Stoch(5,3) > 50, {bullish} +1, {bearish}-1) )
```

Blue Line - 13 day Smoothed Moving Average

```
{This code can be cleaned up using the Sum function.
It was written in this expanded form during debugging}
p8:= Ref((H+L)/2,-8);
p7:= Ref((H+L)/2,-7);
p6:= Ref((H+L)/2,-6);
p5:= Ref((H+L)/2,-5);
p4:= Ref((H+L)/2,-4);
p3:= Ref((H+L)/2,-3);
p2:= Ref((H+L)/2,-2);
p1:= Ref((H+L)/2,-1);
p0:= (H+L)/2;

PrevSum:= p8+p7+p6+p5+p4+p3+p2+p1;
PrevAve:= PrevSum/8;

Ref((PrevSum - PrevAve + p0)/8,-5)
```

BODY Momentum

```
Lb:=Input("Look-Back Period?",3,60,14);
B:=CLOSE - OPEN;
Bup:= Sum(B > 0, Lb);
Bdn:= Sum(B < 0, Lb);
BM:=(Bup/(Bup+Bdn))*100;
Mov(Bm,3,S)
```

Bollinger Band Histogram

```
((C+2*Std(C,20) - Mov(C,20,S)) / (4*Std(C,20)))*4 – 2
```

Bollinger Band Hook 2 in 1

```
{Upper BB Hook Down}
UpperBB:= Mov(C,20,S) + (2*(Std(C,20)));
C < UpperBB AND Ref(C,-1) > Ref(UpperBB,-1);
{ Lower BB Hook Up}
LowerBB:= Mov(C,20,S) - (2*(Std(C,20)));
C > LowerBB AND Ref(C,-1) < Ref(LowerBB,-1);
```

Bollinger Band / Flexible Parameter

```
N:=Input("Lookback Period", 9, 220, 90);
M:=N; {Period used for Momentum Index}
SD:=1.5; {Number of Stdev's around FlexPivot}
MI:= CMO(C ,M ) / 100; { Momentum Index }
MA:= Mov(C, N, S); { Moving Average }
FlxP := If( MI > 0,
{ THEN }
MA + (MI * (HHV(C, M) - MA)),
{ ELSE }
MA + (MI * (MA - LLV(C, M))) );
{ ENDIF }

LBand := FlxP - SD * Stdev(INDICATOR, N);
UBand := FlxP + SD * Stdev(INDICATOR, N);
UBand;
FlxP;
LBand;
```

Bollinger Band Width by Alberto Torchio

Band Width Indicator

```
4*(std(C,20))/mov(C,20,S)
```

Band Width Indicator HHV

```
hhv(4*(std(C,20))/mov(C,20,S),250)/3
```

Bollinger Bands by John Bollinger

%B

```
( ( C+2 * std( C,20 ) - mov( C,20,S ) ) / ( 4 * std( C,20 ) ) ) * 100
```

Band Width

((mov(C,20,S) + (2*(std(C,20))) - (mov(C,20,S) - (2*(std(C,20)))) / mov(C,20,S)))

Upper Band:
mov(C,20,S) + (2 * (std(C ,20)))

Lower Band:
mov(C,20,S) - (2 * (std(C ,20)))

Middle Band:
mov(C,20,S)

Bollinger Bands 3 in 1

Periods:=Input("Dlugość Średniej -",5,50,20);
; {Upp} Mov(C, Periods, S) + (2 * Stdev(C, Periods))
; {Mid} Mov(C, Periods, S)
; {Low} Mov(C, Periods, S) - (2 * Stdev(C, Periods))

Bollinger Bands as Oscillator I

(CLOSE - (Mov(CLOSE, 14, S))) / Stdev(CLOSE, 14)

Bollinger Bands as Oscillator II

100*(C-Mov(C,20,S)+2*Stdev(C,20))/(4*Stdev(C,20))

Bollinger Bands as Oscillator III

A:= Input("LiczbaStDev ?",1,10,2);
B:= Input("OkresStDev ?",1,100,20);
D:= Input("Liczba StDev2 ?",1,10,4);
((C+A*Stdev(C,B)-Mov(C,B,S))/(D*(Std(C,B)))*100)

Bollinger Band Oscillator - CCT

((C+2*Std(C,21)-Mov(C,21,S))/(4*(Std(C,21)))*100)

BPDL Trend Filter Oscillator

```
((Cum((If((Mov((C-Ref(C,-1)),21,S))>0,1,-1) * Pwr(((Mov((Pwr(C-Ref(C,-1),2)),21,S))+1),.5)) +
((Pwr(((Pwr(C-Ref(C,-1),2))+1),.5))) *
If((C>Ref(C,-1)),1,-1))) -
(ref(((Cum((If((Mov((C-Ref(C,-1)),21,S))>0,1,-1)* Pwr(((Mov((Pwr(C-Ref(C,-1),2)),21,S))+1),.5)) +
((Pwr(((Pwr(C-Ref(C,-1),2))+1),.5))) *
If((C>Ref(C,-1)),1,-1)))),-21))) /
((hhv((Cum((If((Mov((C-Ref(C,-1)),21,S))>0,1,-1)* Pwr(((Mov((Pwr(C-Ref(C,-1),2)),21,S))+1),.5)) +
((Pwr(((Pwr(C-Ref(C,-1),2))+1),.5))) *
If((C>Ref(C,-1)),1,-1))),21)) -
(llv((Cum((If((Mov((C-Ref(C,-1)),21,S))>0,1,-1)* Pwr(((Mov((Pwr(C-Ref(C,-1),2)),21,S))+1),.5)) +
((Pwr(((Pwr(C-Ref(C,-1),2))+1),.5))) *
If((C>Ref(C,-1)),1,-1))),21)))
```

BradCCI

BradCCI Line 1

```
(((H+L+C)/3)-Mov(C,28,S))/(.015*Std(C,28))
```

BradCCI Line 2

```
Std(((h+l+c)/3),28)
```

Breadth Advance Decline Indicator

```
Mov( Security("X.WSE-A",O) /
  ( Security("X.WSE-A",O) + Security("X.WSE-D",O) ),10,S)
```

Breadth Thrust

```
Mov( (Security("X.WSE-A",O)) /
( (Security("X.WSE-A",O)) + (Security("X.WSE-D",O)) ), 10, E )
```

Breakout Range2

```
lb:=4; { number of periods in look back }
event:=H > HHV(Ref(H,-1),lb);
```

```
If(event AND (Ref(BarsSince(event),-1)>=lb), Ref(BarsSince(event),-1), 0 )
```

Buff Averages

```
X:=Input("Time Periods",1,500,25);
Sum(V*C, X) / (Cum(V) - Ref( Cum(V), -X))
```

Buy and Hold Indicator

Buy and Hold Indicator %

```
periods:=Cum(If(C>0,1,0));
percnt:=C/ValueWhen(1,periods=1,C);
percnt;
```

Buy and Hold Indicator $$

```
periods:=Cum(If(C>0,1,0));
dollars:=C-ValueWhen(1,periods=1,C);
dollars;
```

Calibrated Summation Index

```
(1000-(9*Mov(C,19,E)))+(19*Mov(C,39,E))
```

CandlCode & ICS by Viktor Likhovidov

body

```
Abs(O-C)
```

lshd

```
If(C>=O,O-L,C-L)
```

ushd

If(C>=O,H-C,H-O)

ThBot_b
BBandBot(Fml("body"), 55, E, 0.5)

ThTop_b
BBandTop(Fml("body"), 55, E, 0.5)

ThBot_l
BBandBot(Fml("lshd"), 55, E, 0.5)

ThTop_l
BBandTop(Fml("lshd"), 55, E, 0.5)

ThBot_u
BBandBot(Fml("ushd"), 55, E, 0.5)

ThTop_u
BBandTop(Fml("ushd"), 55, E, 0.5)

CandleCode-b

```
If(CLOSE=OPEN,1,0) *
If(Fml("ushd") >= Fml("lshd"),64,48) + If(CLOSE=OPEN,0,1) * (If(CLOSE>OPEN,1,0) *
(If(Fml("body") <= Fml("ThBot_b"),80,0)+ If(Fml("body") > Fml("ThBot_b") AND
Fml("body") <= Fml("ThTop_b"),96,0) + If(Fml("body") > Fml("ThTop_b" ),112,0)) +
If(CLOSE<OPEN,1,0) * (If(Fml("body") <= Fml("ThBot_b"),32,0) +
If(Fml("body") > Fml("ThBot_b") AND Fml("body") <= Fml("ThTop_b"),16,0)))
```

CandleCode-l

```
If(Fml("lshd") = 0,3,0) + If(Fml("lshd") < Fml("ThBot_l") AND
Fml("lshd") > 0,2,0)+ If(Fml("lshd") > Fml("ThBot_l") AND

Fml("lshd") <= Fml("ThTop_l") ANDFml("lshd") > 0,1,0)
```

CandleCode-u

```
If(Fml("ushd") > 0 AND Fml("ushd") <= Fml("ThBot_u"), 4, 0) +
If(Fml("ushd") > Fml("ThBot_u") AND Fml("ushd") <= Fml("ThTop_u"), 8, 0)+
If(Fml("ushd") > Fml("ThTop_u"), 12, 0)
```

CandlCode

```
Fml( "CandleCode-b" ) + Fml( "CandleCode-l" ) + Fml( "CandleCode-u" )
```

ICS

```
Periods:=Input("Enter Periods",2,13,2);

Mov(Mov(Mov(Fml("CandlCode"),Periods,S),Periods,S),Periods,S)
```

CandleCode II

```
Bdy:=Abs(O-C);
Lshd:=If(C>=O,O-L,C-L);
Ushd:=If(C>=O,H-C,H-O);
ThBotB:=BBandBot(Bdy,55,E,0.5);
ThTopB:=BBandTop(Bdy,55,E,0.5);
ThBotL:=BBandBot(Lshd,55,E,0.5);
ThTopL:=BBandTop(Lshd,55,E,0.5);
ThBotU:=BBandBot(Ushd,55,E,0.5);
ThTopU:=BBandTop(Ushd,55,E,0.5);
CCode:=If(C=O,1,0) *
If(Ushd>=Lshd,64,48)+If(C=O,0,1)*(If(C>O,1,0)*(If(Bdy<=ThBotB,80,0)+If(Bdy>ThBotB AND
Bdy<=ThTopB,96,0)+ If(Bdy>ThTopB,112,0)) + If(C<O,1,0)*(If(Bdy<=ThBotB,32,0)+ If(Bdy>ThBotB
AND
Bdy<=ThTopB,16,0)))+(If(Lshd=0,3,0)+ If(Lshd<ThBotLAND Lshd>0,2,0)+ If(Lshd>ThBotL AND
Lshd<=ThTopL AND
Lshd>0,1,0))+(If(Ushd>0 AND Ushd<=ThBotU,4,0)+If(Ushd>ThbotU AND Ushd<=ThTopU,8,0)+
If(Ushd>ThTopU,12,0));
CCode;
```

CandleShadow Resistance

```
ShadowResistance:=If(OPEN<CLOSE,(HIGH-CLOSE),(HIGH-OPEN));
Mov(ShadowResistance,3,S);
```

{for not so short-term results, use: Mov(ShadowResistance,10,w)}

CandleShadow Support

```
ShadowSupport:=If(CLOSE>OPEN,(OPEN-LOW),(CLOSE-LOW));
Mov(ShadowSupport,3,S);
{for not so short-term results, use: Mov(ShadowSupport,10,w)}
```

Chaikin Money Flow Indicator

```
sum(((( C-L ) - ( H-C )) / ( H-L )) * V,21) / sum(V,21)
```

Chaikin Oscillator

```
Mov(cum(((C-L)-(H-C)/(H-L))*V),3,E)-Mov(cum(((C-L)-(H-C)/(H-L))*V),10,E)
```

Chaikin Volume Accumulation

```
cv:= Input("Period -",5,200,25);
{10000 + }
(((CLOSE - LLV(CLOSE,cv)) - (HHV(CLOSE,cv) - CLOSE)) /
        (HHV(CLOSE,cv ) -  LLV(CLOSE,cv)))
* VOLUME
```

Chande's Momentum Oscillator

```
100 * ((Sum(If(C,>,Ref(C,-1),(C-Ref(C,-1)),0),14)) -  (Sum(If(C,<,REF(C,-1),(REF(C,-1)-C),0),14))) /
((Sum(If(C,>,Ref(C,-1),(C-Ref(C,-1)),0),14) +  (Sum(If(C,<,REF(C,-1),(REF(C,-1)-C),0),14))))
```

Chande's Momentum Oscillator Composite Average

```
(((CMO(C,5))+(CMO(C,10))+(CMO(C,20)))/3)
```

Chande's Momentum Oscillator Volatility

```
S1:= Stdev(CMO(C,5),5);
S2:= Stdev(CMO(C,10),10);
S3:= Stdev(CMO(C,20),20);
CMOV:=(S1*CMO(C,5))+(S2*CMO(C,10))+(S3*CMO(C,20))/(S1+S2+S3);
CMOV;
```

Chande's QStick

```
MOV((C-O),8,S)
```

Chande's & Kroll's R2 Indicator

Chande's r2

```
Pwr(Corr(Cum( 1 ),C,14,0),2)
```

Chande's r2 Smoothed

```
Mov(Pwr(Corr(Cum( 1 ),C,14,0),2)*100,14,S)
```

Chande's Target Price

```
A:=Mov(Abs(C-Ref(C,-1)),10,S);
TPH1:=C+A;
TPH2:=C+(2*A);
TPL1:=C-A;
TPL2:=C-(2*A);
TPH1;
TPH2;
TPL1;
TPL2;
```

Chande's Trendscore

```
If(C>=Ref(C,-11),1,-1) + If(C>=Ref(C,-12),1,-1) +
If(C>=Ref(C,-13),1,-1) + If(C>=Ref(C,-14),1,-1) +
If(C>=Ref(C,-15),1,-1) + If(C>=Ref(C,-16),1,-1) +
If(C>=Ref(C,-17),1,-1) + If(C>=Ref(C,-18),1,-1) +
If(C>=Ref(C,-19),1,-1) + If(C>=Ref(C,-20),1,-1)
```

Chande's VIDYA 21,5 Indicator

```
Length:=Input("Length",1,200,21);
Smooth:=Input("Smoothing",1,200,5);
AbsCMO:=(Abs(CMO(C,Length)))/100;
SC:=2/(Smooth+1);
VIDYA:=If(Cum(1)<=(Length+1),C,(SC*AbsCMO*CLOSE)+(1-(SC*AbsCMO))*PREV);
VIDYA
```

Chande's Vidya - Other Version

```
K:=Stdev(P,5)/Mov(Stdev(P,5),20,S);
SC:=Input("SC",.1,.9,.1);
Vidya:=SC*K*P+(1-SC*K)*Ref(P,-1);
Vidya;
```

Chande's Vidya Using P Variable Version I

```
Pds:= Input("Number of Periods?",1,1000,20);
Alpha:= 2/(Pds+1);
{Chande Momentum Oscillator}
{UD = Up day}
{DD = Down day}
UD:= Sum((C-Ref(C,-1))*(C>Ref(C,-1)),9);
DD:= Sum((Ref(C,-1)-C)*(C<Ref(C,-1)),9);
CMOsc:= (UD-DD)/(UD+DD);
k:= Abs(CMOsc);
Vidya:= (Cum(1) < Pds) * C + (Cum(1)>=Pds) * ((Alpha * k * C) + (1-Alpha * k) * PREV);
Vidya
```

Chande's Vidya Using P Variable Version II

```
Periods:=Input("length of MA",5,100,20);
K:=Stdev(P,5)/Mov(Stdev(P,5),20,S);
A:=(2/(Periods+1));
Vidya:=A*K*(P)+(1-A*K)*Ref(P,-1);
Vidya;
```

Chande's Vidya with Volatility Bands

```
K:=Stdev(C,5) / Mov(Stdev(C,5),20,S);
SC:=0.9;
Vidya:=SC*K*C+(1-SC*K)*Ref(C,-1);
UpperBand:=Vidya+2*.5*K;
```

```
LowerBand:=Vidya-2*.5*K;
UpperBand;
LowerBand;
Vidya;
```

Chandelier Exit Variation

```
Stop1:=If( PREV < L,
{then} If(( H - 3*ATR(10) ) >= PREV,
{then} ( H - 3*ATR(10) ),
{else} PREV),
{else (L <= PREV)}
( H - 3*ATR(10) ));

Stop2:=If( PREV < L,
{then} If(( C - 2.5*ATR(10) ) >= PREV,
{then} ( C - 2.5*ATR(10) ),
{else} PREV),
{else (L <= PREV)}
( C - 2.5*ATR(10) ));

StopVal:=If(Stop1>Stop2,Stop1,Stop2);

StopVal;
```

Changing Ways Accumulation / Distribution

```
Cum(
If((C - Ref(C,-1)) > Mov((C - Ref(C,-1)),7,E) AND C > Ref(C,-1),C + V,
If((C - Ref(C,-1)) < Mov((C - Ref(C,-1)),7,E) AND C < Ref(C,-1), Neg(C + V) ,0)))
```

Chaos Fractal (Simple Version +1=Up, -1=Dn)

```
High1 := Ref(HIGH,-2);
High2 := Ref(HIGH,-1);
High3 := Ref(HIGH,0);
High4 := Ref(HIGH,1);
High5 := Ref(HIGH,2);
Low1 := Ref(LOW,-2);
Low2 := Ref(LOW,-1);
Low3 := Ref(LOW,0);
Low4 := Ref(LOW,1);
Low5 := Ref(LOW,2);

Fractal :=
If(
```

```
(High3 > High1) AND
(High3 > High2) AND
(High3 > High4) AND
(High3 > High5), +1,0);

Fractal :=
If(
(Low3 < Low1) AND
(Low3 < Low2) AND
(Low3 < Low4) AND
(Low3 < Low5),
If(Fractal > 0, 0, -1), Fractal);

Fractal;
```

Choppiness Index

```
((log(sum(atr(1),14) / (hhv(if(H,>=,ref(C,-1),H,ref(C,-1)),14) -
llv(if(L,<=,ref(C,-1),L,ref(C,-1)),14))) / log(10))/(log(14)/log(10))) * 100
```

Close From 3 Days Ago

```
n:=Input("periods",2,3,3);
ValueWhen(1,n=2,Ref(C,-2));
ValueWhen(1,n=3,Ref(C,-3));
```

Close Relation To High Low

```
(C-L) / (H-L)
```

Close Within a % Band of the MA

Close Within a % Band of the MA I

```
pcent:=5;
range:=Mov(C,200,E)*pcent/100;
C < Mov(C,200,E)+range AND C > Mov(C,200,E)-range
```

Close Within a % Band of the MA II

```
pcent:=5;
```

```
range:=Mov(C,200,E)*pcent/100;
C < Mov(C,200,E)+range and C > mov(c,200,e) and mov(c,5,e) < ref(mov(c,5,e),-1)
```

CMO Filtered

```
momu:=If(C>Ref(C,-1),C-Ref(C,-1),0);
momd:=If(C<Ref(C,-1),Ref(C,-1)-C,0);
A1:=Stdev(momu,100);
A2:=Stdev(momd,100);
Mup:=If(C-Ref(C,-1)>A1,C-Ref(C,-1),0);
Mdn:=If(Ref(C,-1)-C>A2,Ref(C,-1)-C,0);
Periods:=Input("Length",5,100,13);
CMOF:=100*((Sum(Mup,Periods)-Sum(Mdn,Periods))
/(Sum(Mup,Periods)+Sum(Mdn,Periods)));
Sig:=Mov(CMOF,10,S);
Hist:=CMOF-Sig;
Hist;
Sig;
CMOF;
```

Coding Candlesticks (II) by Viktor Likhovidov

CandleWeight Indicator

```
If(CLOSE=OPEN,1,0) * If(Fml("ushd") >= Fml("lshd"),64,-64) +
If(CLOSE=OPEN,0,1) * If(CLOSE>OPEN,1,-1) *
(If(Fml("body") <= Fml("ThBot_b"),80,0) +
If(Fml("body") > Fml("ThBot_b") AND
Fml("body") <= Fml("ThTop_b"),96,0) +
If(Fml("body") > Fml("ThTop_b"),112,0)) +
If(CLOSE>=OPEN,-4,4) * (If(Fml("lshd")= 0,3,0) +
If(Fml("lshd") < Fml("ThBot_l") AND
Fml("lshd") > 0,2,0) +
If(Fml("lshd") > Fml("ThBot_l") AND
Fml("lshd") <=
Fml("ThTop_l") AND Fml("lshd")>0,1,0)) +
If(CLOSE>=OPEN,1,-1) * (If(Fml("ushd")> 0 AND
Fml("ushd")<= Fml("ThBot_u"),4,0) +
If( Fml("ushd")> Fml("ThBot_u") AND
Fml("ushd")<= Fml("ThTop_u"),8,0) +
If(Fml("ushd")> Fml("ThTop_u"),12,0))
```

Coding Example

Ref(H,-1)>Ref(H,-2) AND Ref(L,-5)<=Ref(H,-4) AND Dayofweek() = 3

Confidence %

```
(Sum(Mov(C * (2.5/ Sqrt(50 * V)),10,S) -
 LLV(Mov(C * (2.5/ Sqrt(50 * V)),10,S),5), 3 ) /
 Sum(HHV(Mov(C * (2.5/ Sqrt(50 * V)),10,S),5) -
 LLV(Mov(C * (2.5/ Sqrt(50 * V)),10,S),5), 3) ) * 100
```

Comparative Performance

```
Cum(ROC(Security("TECHWIG",CLOSE),1,%))-Cum(ROC(C,1,%));
0
```

Congestion Index & Consolidation Breakout

Congestion Index

```
((HHV(C,80)-LLV(C,80))/LLV(C,80))*100
```

Consolidation Breakout Upside

```
If(Ref(Fml("Congestion Index"),-5),<,10,
{and} If(Fml("Congestion Index"),>=,10,
{and} If(CLOSE,>,Ref(HHV(C,80),-5),
{and} If(Mov(V,5,S),>=,1.5*(Ref(Mov(V,60,S),-5)),+1,0),0),0),0)
```

Consolidation Breakout Downside

```
If(Ref(Fml("Congestion Index"),-5),<,10{%},
{and} If(Fml("Congestion Index"),>=,10{%},
{and} If(CLOSE,<,Ref(LLV(C,80),-5),
{and} If(Mov(V,5,S),>=,1.5*(Ref(Mov(V,60,S),-5)),+1,0),0),0),0)
```

Coppock Curve

```
(MOV(ROC(MOV(C,22,S),250,%),150,E))/100
```

Coppock Curve - CCT

```
    (ROC(CLOSE,14,percent ) * 10 + ROC(CLOSE,11,percent) * 10 +
ROC(Ref(CLOSE,-1),14,percent) * 9 + ROC(Ref(CLOSE,-1),11,percent) *9 +
ROC(Ref(CLOSE,-2),14,percent) * 8 + ROC(Ref(CLOSE,-2),11,percent) *8 +
ROC(Ref(CLOSE,-3),14,percent) * 7 + ROC(Ref(CLOSE,-3),11,percent) *7 +
ROC(Ref(CLOSE,-4),14,percent) * 6 + ROC(Ref(CLOSE,-4),11,percent) *6 +
ROC(Ref(CLOSE,-5),14,percent) * 5 + ROC(Ref(CLOSE,-5),11,percent) *5 +
ROC(Ref(CLOSE,-6),14,percent) * 4 + ROC(Ref(CLOSE,-6),11,percent) *4 +
```

```
ROC(Ref(CLOSE,-7),14,percent) * 3 + ROC(Ref(CLOSE,-7),11,percent) *3 +
ROC(Ref(CLOSE,-8),14,percent) * 2 + ROC(Ref(CLOSE,-8),11,percent) *2 +
ROC(Ref(CLOSE,-9),14,percent) + ROC(Ref(CLOSE,-9),11,percent)) / 2
```

Coppock Curve - CCT II

```
PK:=(ROC(CLOSE,14,percent )*10 + ROC(CLOSE,11,percent)*10 +
ROC(Ref(CLOSE,-1),14,percent)*9 + ROC(Ref(CLOSE,-1),11,percent)*9 +
ROC(Ref(CLOSE,-2),14,percent)*8 + ROC(Ref(CLOSE,-2),11,percent)*8 +
ROC(Ref(CLOSE,-3),14,percent)*7 + ROC(Ref(CLOSE,-3),11,percent)*7 +
ROC(Ref(CLOSE,-4),14,percent)*6 + ROC(Ref(CLOSE,-4),11,percent)*6 +
ROC(Ref(CLOSE,-5),14,percent)*5 + ROC(Ref(CLOSE,-5),11,percent)*5 +
ROC(Ref(CLOSE,-6),14,percent)*4 + ROC(Ref(CLOSE,-6),11,percent)*4 +
ROC(Ref(CLOSE,-7),14,percent)*3 + ROC(Ref(CLOSE,-7),11,percent)*3 +
ROC(Ref(CLOSE,-8),14,percent)*2 + ROC(Ref(CLOSE,-8),11,percent)*2 +
ROC(Ref(CLOSE,-9),14,percent) + ROC(Ref(CLOSE,-9),11,percent))/2;
Per1:=30;
MN:=Mov(Pk,Per1,S);
SD:=Stdev(Pk,Per1);
Val1:=If(MN+(1.33*SD)>2.08,MN+(1.33*SD),2.08);
Val2:=If(MN-(1.33*SD)<-1.92,MN-(1.33*SD),-1.92);
LN:=If(Ref(Pk,-1)>=0 AND Pk>0,Val1,If(Ref(Pk,-1)<=0 AND Pk<0,Val2,0));

Zielony:=If(PK>Ref(PK,-1),PK,0);
Czerwony:=If(PK<Ref(PK,-1),PK,0);
Sygnal:=Mov(PK,5,S);
LN;
Sygnal;
Zielony;
Czerwony;
```

Coppock Curve - LT Momentum

```
 Mov((CLOSE-Ref(C,-300)) /
(Ref(C,-300)*0.01)+
(CLOSE-Ref(C,-240)) /
(Ref(C,-240)*0.01),15,W)
```

Coppock Indicator

```
Mov((ROC(C,11,%)+ROC(C,14,%)),10,W)
```

Corr Vol / Close

```
( C + ( Ref(C,-1) ) ) * ( V + ( Ref(V,-1)) )
```

Correlation Analysis

```
Correl(MACD(),CLOSE,5,10)>0.90 AND
MACD()<0 AND
MACD()>Ref(MACD(),-1)
```

Countback Line

CBLhi

```
HighDays := Input("Enter # days to cover lastHIGH for CBL calc'n:", 3, 55, 13);

If(HIGH < HHV(HIGH, HighDays), {then ...}PREV, {previous CBLhi, else...} If(Ref(L,-2) < Ref(L,-1)
AND
Ref(L,-2) < L AND
Ref(L,-1) < L, {then ...} Ref(L,-2),{2nd day back low, else...}
If((Ref(L,-3)< Ref(L,-2) AND
Ref(L,-3) <Ref(L,-1) AND
Ref(L,-3) < L) AND
(Ref(L,-2)< L OR
Ref(L,-1) < L),{then ... } Ref(L,-3), {3rd day back low, else...}
If((Ref(L,-4)<Ref(L,-3) AND
Ref(L,-4) < Ref(L,-2) AND
Ref(L,-4)< Ref(L,-1) AND
Ref(L,-4) < L) AND
(Ref(L,-3)< L OR
Ref(L,-2)< L OR
Ref(L,-1) < L), {then... }
Ref(L,-4), {4th day back low, else...}
If((Ref(L,-5)<Ref(L,-4) AND
Ref(L,-5) < Ref(L,-3) AND
Ref(L,-5) < Ref(L,-2) AND
Ref(L,-5) < Ref(L,-1) AND
Ref(L,-5) < L) AND
(Ref(L,-4)< L OR
Ref(L,-3) < L OR
Ref(L,-2) < L OR
Ref(L,-1) < L), {then ...}Ref(L,-5), {5th day back low, else...} PREV )))))
```

CBLlo

```
LowDays := Input("Enter # days to cover lastLOW for CBL calc'n:", 3, 55, 13);

If(LOW > LLV(LOW, LowDays), {then ...} PREV,{previous CBLlo, else...}
If(Ref(H,-2) > Ref(H,-1) AND
```

```
Ref(H,-2)> H AND
Ref(H,-1) > H, {then ...} Ref(H,-2), {2ndday back high,else...}
If((Ref(H,-3)> Ref(H,-2) AND
Ref(H,-3) > Ref(H,-1) AND
Ref(H,-3) > H) AND
(Ref(H,-2)> H OR
Ref(H,-1)> H),{then ... } Ref(H,-3), {3rd day back high,else...}
If((Ref(H,-4)>Ref(H,-3) AND
Ref(H,-4) > Ref(H,-2) AND
Ref(H,-4) >Ref(H,-1) AND
Ref(H,-4) > H) AND
(Ref(H,-3)> H OR
Ref(H,-2) > H OR
Ref(H,-1)> H), {then... }
Ref(H,-4), {4th day back high,else...}
If((Ref(H,-5)>Ref(H,-4) AND
Ref(H,-5) > Ref(H,-3) AND
Ref(H,-5) > Ref(H,-2) AND
Ref(H,-5)> Ref(H,-1) AND
Ref(H,-5) > H) AND
(Ref(H,-4)> H OR
Ref(H,-3)> H OR
Ref(H,-2) > H OR
Ref(H,-1) > H), {then ...} Ref(H,-5), {5th dayback high,else...} PREV )))))
```

Culumative Volume (Variation) Indicator

```
TotalVolume:=LastValue(Cum(V));
n := TotalVolume - Input("Float Volume", 1, 100000000000, 100000000);
TrueDays:=(LastValue(BarsSince(Cum(V)<=n)))-1;
HighestSince(1,(BarsSince(Cum(V)<=n)>0),
LastValue(HHV((HighestSince(1,(BarsSince(Cum(V)<=n)>0),Ref(H,-1))),TrueDays)));
LowestSince(1,(BarsSince(Cum(V)<=n)>0),
LastValue(LLV((LowestSince(1,(BarsSince(Cum(V)<=n)>0),Ref(L,-1))),TrueDays)))
```

Custom A/D Oscillator

```
cum(if(C,>,ref(C,-2),1,if(C,<,ref(C,-2),-1,0)))
```

Cycle Indicator

```
Period:= 10;
denom1:= If(HHV(H,Period)-LLV(L,Period)>0, HHV(H,Period)-LLV(L,Period), 1);
P1:= Mov(((C-LLV(L,Period))/ denom1)*100,3,E);
denom2 := If(HHV(P1,Period)-LLV(P1,Period)>0, HHV(P1,Period)-LLV(P1,Period), 1);
Mov(((P1-LLV(P1,Period))/denom2)*100,3,E)
```

Cyclical System - Jeffrey Owen Katz

```
thresh:= {omit whipsaw} 4;
k:= {roc comparison period} 3;
m:= {cycle period} 63;
hld:= {maximum period holding position} 10;
Value1:= {volatility}
Stdev(Mov(C,m,S)-Mov(C,m+k,S),20);
Value2:= {roc, relative comparison ratio}
Mov(C,m,S)-Mov(C,m+k,S);
tv1:= thresh*Value1;
EL:={Enter Long} Value2>tv1;
CL:={Close Long} Ref(Cross(Value2,tv1),-hld);
ES:={Enter Short} Value2<tv1;
CS:={Close Short} Ref(Cross(tv1,Value2),-hld);
JKcycl:=If((EL>0)=1,+10,
If((ES>0)=1,-10,0));
Jkcycl
```

Dahl Oscillator

```
Mov((Mov(C,55,S) -
 Ref(Mov(C,55,S),-15) -
 LLV(Mov(C,55,S)-
 Ref(Mov(C,55,S),-15),14)) /
(HHV(Mov(C,55,S) -
 Ref(Mov(C,55,S),-15),14) -
(LLV(Mov(C,55,S) -
 Ref(Mov(C,55,S),-15),14))),14,E) * 100
```

DAHL Variations
Dahl Volume Trend

```
Mov(C,55,VOL)-Ref(Mov(C,55,VOL),-15)
```

Dahl PVT Trend

```
Mov((PVT()-Ref( PVT(),-15)),55,E)
```

Dahl Smoothed OBV Vol 88

```
Mov((OBV()-Mov(OBV(),88,VOL)),55,E)
```

Dahl OBV Trend

```
Mov((OBV()-Ref(OBV(),-15)),55,E)
```

Daily Close vs. High and Low Close

```
if((C-L)/(H-L),>,.66 ,1, if((C-L)/(H-L),<,.38,-1,0))
```

Damping Index

```
Ref(Mov((H-L),5,S),-1)/Ref(Mov((H-L),5,S),-6)
```

Darvas Box

```
LowL:=If(Low=LLV(Low,5),Low,If(Ref(Low,-1)=LLV(Low,5),Ref(Low,-1), If(Ref(Low,-
2)=LLV(Low,5),Ref(Low,-2),If(Ref(Low,-3)=LLV(Low,5),Ref(Low,-3), If(Ref(Low,-
4)=LLV(Low,5),Ref(Low,-4),0)))));
NewH:=ValueWhen(1,High>Ref(HHV(High,5),-1),High);
box1:=HHV(High,3)<HHV(High,4);
box2:=ValueWhen(1,BarsSince(High>Ref(HHV(High,5),-1))=3 AND box1=true,NewH);
box3:=ValueWhen(1,BarsSince(High>Ref(HHV(High,5),-1))=3 AND box1=true,LowL);
TopBox:=box2;
BottomBox:=box3;
TopBox;
BottomBox;
```

Dave's New System (DNS)

```
If(SAR(.02,.2)<C,1,0) +
If((Mov(C,5,E)>Mov(C,13,E)),1,0) +
If((Mov(C,13,E)>Mov(C,40,E)),1,0) +
If((Mov(C,8,E)-Mov(C,17,E))> (Mov(Mov(C,8,E)-Mov(C,17,E),9,E)),1,0) +
If(Mov(C,50,SIMPLE) - Ref(Mov(C,50,SIMPLE),-15)> 0,1,0) +
If((Mov(ROC(C,12,%),3,E)>=-6 OR ROC(C,12,%)>0),1,0)+
If(OBV()>Mov(OBV(),40,S),1,0) +
If(V>Mov(V,120,S),1,0)
```

Day Trading Volatility Index - DTVI

```
DTV:= ((HIGH-LOW)*100) / Ref(CLOSE,-1);
Mov(DTV,1,S);
Mov(DTV,5,S)
```

DeMark's Indicator

```
 Sum(If(H, > ,Ref(H,-1),H-Ref(H,-1),0),13) /
(Sum(If(H, > ,Ref(H,-1),H-Ref(H,-1),0),13) +
 Sum(If(L,>= ,Ref(L,-1),0,Ref(L,-1)-L),13))
```

DeMark's Projected Range

```
TPH1:=(H+C+2*L)/2-L;
TPH2:=(2*H+L+C)/2-L;
TPH3:=(H+L+2*C)/2-L;
TPL1:=(H+C+2*L)/2-H;
TPL2:=(2*H+L+C)/2-H;
TPL3:=(H+L+2*C)/2-H;
PH:=If((C<O),TPH1,If((C>O),TPH2,If((C=O),TPH3,0)));
PL:=If((C<O),TPL1,If((C>O),TPL2,If((C=O),TPL3,0)));
PH;
PL;
```

DeMark's Range Expansion Index

```
TD1:= H-Ref(H,-2);
TD2:= L-Ref(L,-2);
TD3:= If((H>=Ref(L,-5) OR H>=Ref(L,-6)) AND(L<=Ref(H,-5) OR L<=Ref(H,-6)),1,0);
TD4:= If((Ref(H,-2)>=Ref(C,-7) OR Ref(H,-2)>=Ref(C,-8)) AND (Ref(L,-2)<=Ref(C,-7) OR Ref(L,-
2)<=Ref(C,-8)),1,0);
TD6:= (TD1) + (TD2);
TD5:= If((TD3) + (TD4)>=1, (TD6), 0);
TD7:= Abs(TD1) + Abs(TD2);
TDREI:=((TD5) + Ref(TD5,-1) + Ref(TD5,-2)+ Ref(TD5,-3) + Ref(TD5,-4)) /(TD7) + Ref(TD7,-1) +
Ref(TD7,-2) + Ref(TD7,-3) + Ref(TD7,-4)*100;
TDREI;
```

Dennis Tilley's Support Line

```
PrCnt:=Input("Percentage",0,100,10);
LookBack:= Input("Look Back Periods",1,1000,10);
Support:=ValueWhen(1,Cross(C,Mov(C,LookBack,S)),LLV(L,LookBack));
Support * ((prcnt/100)+1);
```

Detrended Price Oscillator

```
Close-Ref( Mov(Close, 20, Simple),11)
```

DevStop I

```
AVTR:=Mov(HHV(H,2) - LLV(L,2),20, S);
SD:=Stdev(HHV(H,2) - LLV(L,2),20);
HHV(H-AVTR-3.6*SD, 20);
HHV(H-AVTR-2.2*SD,20);
HHV(H-AVTR-SD,20);
HHV(H-AVTR,20);
```

Diffusion Index

```
ISWPD:=Input("Ile sesji wstecz porównujesz dane ? -",2,999,21);
DISOI:=Input("Dla ilu spółek obliczasz indeks ? -",2,999,9);
ZZ:=(100/DISOI);
Input("Górna Linia Sygnału .",0,100,90);
Input("Linia Zero .",50,50,50);
Input("Dolna Linia Sygnału .",0,100,10);

If(Security("BDX",C)>Ref(Security("BDX",C),-ISWPD),ZZ,0)+
If(Security("EXB",C)>Ref(Security("EXB",C),-ISWPD),ZZ,0)+
If(Security("MSX",C)>Ref(Security("MSX",C),-ISWPD),ZZ,0)+
If(Security("MSZ",C)>Ref(Security("MSZ",C),-ISWPD),ZZ,0)+
If(Security("BIG",C)>Ref(Security("BIG",C),-ISWPD),ZZ,0)+
If(Security("KRB",C)>Ref(Security("KRB",C),-ISWPD),ZZ,0)+
If(Security("BRE",C)>Ref(Security("BRE",C),-ISWPD),ZZ,0)+
If(Security("OPT",C)>Ref(Security("OPT",C),-ISWPD),ZZ,0)+
If(Security("CPL",C)>Ref(Security("CPL",C),-ISWPD),ZZ,0)
```

Directional Movement Index

```
cma:= Input("Time Periods of MA  -",3,100,5);
cpd:= Input("Time Periods of PDI  -",1,100,14);
cmd:= Input("Time Periods of MDI  -",1,100,14);
Input("horizontal line 1",0,1,0.5);
Input("horizontal line 2",-1,0,-0.5);
Mov( ( (PDI(cpd)-MDI(cmd)) / (PDI(cpd)+MDI(cmd)) ), cma ,E)
```

Disparity Index

```
( ( C - Mov( C ,13,E ) ) / Mov( C ,13 ,E )) * 100
```

Displace Indicator Forward

```
Period:= Input("What Period",1,250,10);
Disp:= Input("Forward Displacement",0,250,10);
EMA1:= Mov(MP(),Period,E);
EMA2:= Mov(EMA1,Period,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA:= EMA1 + Difference;
Ref(ZeroLagEMA,-Disp)
```

Divergence Between the Close and MACD

```
Correl(((Sum(Cum(1)*(Mov(C,12,E)-Mov(C,26,E)),100))-(Sum(Cum(1),100)*
Sum((Mov(C,12,E)-Mov(C,26,E)),100)/100))/((Sum(Power(Cum(1),2),100))-
(Power(Sum(Cum(1),100),2)/100)),((Sum(Cum(1)*C,100))-(Sum(Cum(1),100)*
Sum(C,100)/100))/((Sum(Power(Cum(1),2),100))-(Power(Sum(Cum(1),100),2)/100)),12,0)
Divergence Formula

EKA:=3;
I1:=Zig(RSI(14),EKA,%)>Ref(Zig(RSI(14),EKA,%),-1) AND
Ref(Zig(RSI(14),EKA,%),-1)<Ref(Zig(RSI(14),EKA,%),-2);
V1:=ValueWhen(1,I1,Ref(Zig(RSI(14),EKA,%),-1));
V2:=ValueWhen(1,I1,Ref(C,-1));
V3:=ValueWhen(2,I1, Ref(Zig(RSI(14),EKA,%),-1));
V4:=ValueWhen(2,I1,Ref(C,-1));
C1:=V1>V3 AND V2<V4 ;
C1 AND Ref(C1,-1)=0 AND RSI(14)>Ref(RSI(14),-1)
```

Double Successive Divergence

```
I1:=Zig(RSI(14),3,%)>Ref(Zig(RSI(14),3,%),-1) AND
Ref(Zig(RSI(14),3,%),-1)<Ref(Zig(RSI(14),3,%),-2);
V1:=ValueWhen(1,I1,Ref(Zig(RSI(14),3,%),-1));
V2:=ValueWhen(1,I1,Ref(C,-1));
V3:=ValueWhen(2,I1, Ref(Zig(RSI(14),3,%),-1));
V4:=ValueWhen(2,I1,Ref(C,-1));
V5:=ValueWhen(3,I1, Ref(Zig(RSI(14),3,%),-1));
V6:=ValueWhen(3,I1,Ref(C,-1));
C1:=V1<V3 AND V2>V4 AND V3<V5 AND V4>V6 ;
C1 AND Ref(C1,-1)=0 AND RSI(14)>Ref(RSI(14),-1)
```

Donchain Channels

```
Periods:= Input("Enter number of periods", 20, 60, 20);
UpperChannelLine:= Ref(HHV(HIGH, Periods), -1);
LowerChannelLine:= Ref(LLV(LOW, Periods), -1);
UpperChannelLine; LowerChannelLine
```

Double Tops

```
PK:=Zig(C,10,%)<Ref(Zig(C,10,%),-1) AND Ref(Zig(C,10,%),-1)>Ref(Zig(C,10,%),-2);
TR:=Zig(C,10,%)>Ref(Zig(C,10,%),-1) AND Ref(Zig(C,10,%),-1)<Ref(Zig(C,10,%),-2);
PK1:=PeakBars(1,C,10);
PK2:=PeakBars(2,C,10);
(ValueWhen(1,PK,Ref(C,-1)) / ValueWhen(2,PK,Ref(C,-1))>.96 AND  ValueWhen(1,PK,Ref(C,-1)) /
 ValueWhen(2,PK,Ref(C,-1)) < 1.04) AND PK2-PK1>=10 AND Cross(ValueWhen(1,TR,Ref(C,-1)),C)
```

Double Bottoms

```
PK:=Zig(C,10,%)<Ref(Zig(C,10,%),-1) AND Ref(Zig(C,10,%),-1)>Ref(Zig(C,10,%),-2);
TR:=Zig(C,10,%)>Ref(Zig(C,10,%),-1) AND Ref(Zig(C,10,%),-1)<Ref(Zig(C,10,%),-2);
TR1:=TroughBars(1,C,10);
TR2:=TroughBars(2,C,10);
(ValueWhen(1,TR,Ref(C,-1))/ ValueWhen(2,TR,Ref(C,-1))>.96 AND  ValueWhen(1,TR,Ref(C,-1)) /
 ValueWhen(2,TR,Ref(C,-1)) < 1.04) AND TR2-TR1>=10 AND Cross(C,ValueWhen(1,PK,Ref(C,-1)))
```

Double Key

```
(Ref(H,-1)>Ref(H,-2) AND Ref(C,-1)<Ref(C,-2) AND C<Ref(C,-1) AND
H>Ref(H,-1) AND L<Ref(L,-1) AND Ref(C>((H-L)*.75)+L,-2))
OR
(Ref(L,-1)<Ref(L,-2) AND Ref(C,-1)>Ref(C,-2) AND C>Ref(C,-1) AND
H>Ref(H,-1) AND L<Ref(L,-1) AND Ref(C<((H-L)*.25)+L,-2))
Downtrend Signal

Peak(1, If(L<Ref(LLV(L,4),-1), Ref(HHV(H,4),-1),0),1)<>
Ref(Peak(1, If(L<Ref(LLV(L,4),-1), Ref(HHV(H,4),-1),0),1),-1)
```

DS_EMA_X_MP()

```
If(
Cross(Mov(Mov(MP(),4,E),4,E),Mov(Mov(MP(),8,E),8,E)),1,
If(
Cross(Mov(Mov(MP(),8,E),8,E),Mov(Mov(MP(),4,E),4,E)),-1,
0))
Dual Oscillator B - Wave +1 buy, -1 sell

if(
 (mov(C,2,S)-mov(C,10,S)),>,
  (mov((H+L+C)/3,5,S) - mov((H+L+C)/3,20,S) ),
if(
 ref((mov(C,2,S)-mov(C,10,S)),-1),<,
  ref((mov((H+L+C)/3,5,S) - mov((H+L+C)/3,20,S) ),-1),+1,
if(
 (mov(C,2,S)-mov(C,10,S)),<,
  (mov((H+L+C)/3,5,S) - mov((H+L+C)/3,20,S) ),
```

```
if(
 ref((mov(C,2,S)-mov(C,10,S)),-1),>,
  ref((mov((H+L+C)/3,5,S) - mov((H+L+C)/3,20,S) ),-1),-1,0),0)),0)
```

Dunnigan Trend
Dunn-Type1

```
TD1:=If(BarsSince(H>Ref(H,-1) AND L>Ref(L,-1)) <
BarsSince(L<Ref(L,-1) AND H<Ref(H,-1)),
{then}1,
{else}-1);
TD1
```

Dunn-Type2

```
TD1:=If(BarsSince((H>Ref(H,-1) AND L>Ref(L,-1))
AND (Ref(H,-1)>Ref(H,-2)
AND Ref(L,-1)>Ref(L,-2))) <
BarsSince((L<Ref(L,-1) AND H<Ref(H,-1))
AND (Ref(L,-1)<Ref(L,-2)
AND Ref(H,-1)<Ref(H,-2))),
{then}1,
{else}-1);
TD1
```

Dunnigan Trend

```
{Ask to use 1 day or 2 day Swing type}
St:=Input("Short Term Swing Type, 1 or 2 ?",
1,2,2);
{Call Swing Type Formula}
Sd:=If(Round(St)=1,
{then} FmlVar("Dunn-Type1","TD1"),
{else} FmlVar("Dunn-Type2","TD1"));
{Number Of Periods Since Swing Started Up}
Hc:=BarsSince(SD=-1);
{Number Of Periods Since Swing Started Down}
Lc:=BarsSince(SD=1);
{Find Highest Value Of Up Swing}
Hv:=If(Hc>Lc AND H>Ref(H,-1),
{then}HighestSince(1,Hc=1,H),
{else}0);
{Find Lowest Value Of Down Swing}
Lv:=If(Hc<Lc AND L<Ref(L,-1),
{then}LowestSince(1,Lc=1,L),
{else}0);
{Find The Low Of The Highest High}
Hlv:=ValueWhen(1,H=Hv,L);
{Find The High Of The Lowest Low}
Lhv:=ValueWhen(1,L=Lv,H);
{Calculate And Plot Trend Direction, Note:1= Uptrend, -1= Downtrend}
TD2:=If(Sd=1 AND H>Lhv,
{then}1,
```

```
{else}If(Sd=-1 AND L<Hlv,
{then}-1,
{else}0));
TD3:=ValueWhen(1,TD2<>0,TD2);
TD3
```

Durmmond's PLdot

```
(Ref(C,-1)+Ref(C,-2)+Ref(C,-3)+Ref(H,-1)+Ref(H,-2)+Ref(H,-3)+Ref(L,-1)+Ref(L,-2)+Ref(L,-3))/9
```

Dynamic Momentum Oscillator by E. Marshall Wall
Dynamo Oscillator to Stochastic Oscillator

```
50-(Mov(Stoch(5,3),21,S)-Stoch(5,3))
```

Dynamo Oscillator to RSI

```
50-(Mov(RSI(14),21,S)-RSI(14))
```

Dynamic Multiple Time Frames
Dynamic Balance Point

```
Ref( HHV(H,5)+LLV(L,5)+C, -1)/3
```

Dynamic BP Steps

```
WBPS:= Ref( (HHV(H,5)+LLV(L,5)+C)/3,-1);
( WBPS + Ref(WBPS,-5) + Ref(WBPS,-10) + Ref(WBPS,-15) + Ref(WBPS,-20) ) / 5
```

Fixed Balance Point

```
day:=DayOfWeek();
FBC:= If(day=1,
If(BarsSince(day=1)>5,
Ref( HighestSince(1,day=2,H) + LowestSince(1,day=2,L)+C,-1)/3,
Ref( HighestSince(1,day=1,H) + LowestSince(1,day=1,L)+C,-1)/3),
If(day=2 AND Ref(day,-1)>1,
If(BarsSince(day=1)>5,
Ref( HighestSince(1,day=2,H) + LowestSince(1,day=2,L)+C,-1)/3,
Ref( HighestSince(1,day=1,H) + LowestSince(1,day=1,L)+C,-1)/3),0));
ValueWhen(1,FBC>0,FBC)
```

Dynamic Zone Williams%R Indicator

```
PR:=Input("Enter Periods for W%R",1,100,14);
PB:=Input("Enter Periods for BUY",1,100,20);
PS:=Input("Enter Periods for SELL",1,100,20);
{CONVERT W%R TO +/-50 OSC}
DWR:=(Mov(WillR(PR),2,S))+50;
UpZone:=Mov(DWR,PS,S)+(1.3185 * Stdev(DWR,PS));
LwZone:=Mov(DWR,PB,S)-(1.3185 * Stdev(DWR,PB));
MidZone:=(UpZone + LwZone)/2;
MidZone;
UpZone;
LwZone;
DWR
```

Dynamic Zones

```
PR:=Input("Enter Periods for RSI",1,100,9);
PB:=Input("Enter Periods for BUY",1,100,70);
PS:=Input("Enter Periods for SELL",1,100,70);
UpZone:=Mov(RSI(PR),PS,S)+(1.3185 *Stdev(RSI(PR),PS));
LwZone:=Mov(RSI(PR),PB,S)-(1.3185 *Stdev(RSI(PR),PB));
UpZone;
LwZone;
```

Ease of Movement

```
( (C - Ref(C,-1)) ) / V
```

ECO - Ergodic Candlestick Oscillator

```
(MOV(MOV(C-O,5,E))26,E)/MOV(MOV(H-L,5,E))26,E))*100
```

Efficiency Ratio

```
TimePeriods := Input("Time periods",1,10000,10);

(Abs(CLOSE - Ref(CLOSE,-TimePeriods))) /
(Sum(Abs(CLOSE-Ref(CLOSE,-1)),TimePeriods))
```

Ehlers Filter

```
ti:= 15;
pr:= MP();
coef:= Abs(pr - Ref(pr,-5));
Sum(coef*pr,ti)/Sum(coef,ti)
```

Distant Coefficient Ehlers Filter

```
ti:= 15;
pr:= MP();
coef:=Sum(Power(Ref(LastValue(pr+PREV-PREV)-pr,-1),2),ti);
Sum(coef*pr,ti)/Sum(coef,ti)
```

Elder's Force Index, Bull & Bear Power

Elder's Bull Power

```
H - Mov(C,13,E)
```

Elder's Bear Power

```
L - Mov(C,13,E)
```

Elder's SIROC

ROC(Mov(C,13,E),21,%)

Elliott Oscillator

Elliot Oscillator I

Mov((H+L)/2,5,S)-Mov((H+L)/2,34,S)

Elliot Oscillator II

Mov(C,5,S)-Mov(C,34,S)

Elliot Oscillator III

ShortMA:= Input("Wartość krótkiej średniej -",2,15,5);
LongMA:= Input("Wartość długiej średniej -",5,100,35);
Mov((H+L)/2,ShortMA,S)-Mov((H+L)/2,LongMA,S)

Elliott Wave Identification

Mov(OscP(5,34,E,$),5,S)

End Point Moving Average

(14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14) * Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)) *
Cum(1) + (Mov(C,14,S) - Mov(Cum(1),14,S) *
(14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14) * Sum(C,14)) /
(14 *Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)))

End Points of a Linear Regression Line

***Linear Regression (14)**

(14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14)* Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)) *
Cum(1) + (Mov(C,14,S) - Mov(Cum(1),14,S) *
(14 * Sum(Cum(1)* C,14) - Sum(Cum(1),14) * Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)))

***Linear Regression Lower Band**

Fml("*Linear Regression (14)") - 2 * Stdev(Fml("*Linear Regression (14)") ,14)

***Linear Regression Upper Band**

Fml("*Linear Regression (14)") + 2 * Stdev(Fml("*Linear Regression (14)") ,14)

End Points of Linear Regression Band's

;((14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14)* Sum(C,14)) /

```
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)) * Cum(1)+
(Mov(C,14,S) - Mov(Cum(1),14,S) * (14 * Sum(Cum(1)* C,14) -
Sum(Cum(1),14) * Sum(C,14)) / (14 * Sum(Pwr(Cum(1),2),14) -
Pwr(Sum(Cum(1),14),2)))) - 2 * Stdev( ((14* Sum(Cum(1) * C,14) -
Sum(Cum(1),14)* Sum(C,14)) /(14 * Sum(Pwr(Cum(1),2),14) -
Pwr(Sum(Cum(1),14),2)) * Cum(1) + (Mov(C,14,S)- Mov(Cum(1),14,S) *
(14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14) * Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)))),14) {Up}

;((14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14)* Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)) * Cum(1)+
(Mov(C,14,S) - Mov(Cum(1),14,S) * (14 * Sum(Cum(1)* C,14) -
Sum(Cum(1),14) * Sum(C,14)) / (14 * Sum(Pwr(Cum(1),2),14) -
Pwr(Sum(Cum(1),14),2)))) + 2 * Stdev( ( (14* Sum(Cum(1) * C,14) -
Sum(Cum(1),14)* Sum(C,14)) /(14 * Sum(Pwr(Cum(1),2),14) -
Pwr(Sum(Cum(1),14),2)) * Cum(1) + (Mov(C,14,S)- Mov(Cum(1),14,S) *
(14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14) * Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)))),14) {Down}
```

Entry Price

```
EntryPrice := Input("Entry price" ,0 ,100000 ,10 ) ;
(CLOSE - EntryPrice) / EntryPrice * 100
```

Envelope - Koperta

```
Dsre:= Input("Długość Średniej - .",10,100,45);
Dpro:= Input("% Średniej - .",0.1,100,15);

;Mov(C,Dsre,S) + ( (Dpro{%}/100) * Mov(C,Dsre,S))
;Mov(C,Dsre,S)
;Mov(C,Dsre,S) - ( (Dpro{%}/100) * Mov(C,Dsre,S))
```

Excel Confidence %

```
(Sum( Mov(C * (2.5/ Sqrt(50 * V)),10,S) -
LLV(Mov(C* (2.5/ Sqrt(50 * V)),10,S),5), 3 ) /
 Sum( HHV(Mov(C * (2.5/ Sqrt(50 * V)),10,S),5)-
LLV(Mov(C * (2.5/ Sqrt(50 * V)),10,S),5), 3) ) * 100
```

eVWMA

```
n := Input("Enter the number of shares: ",1,1000000,1);
eVWMA := ((n-V)*PREV+(V*C))/n;
eVWMA
```

FibAccordion - CCT

```
(Mov(C,13,E)-Mov(C,144,E))
```

FibboGatto 1

```
((c +
   ref(c,-1) +
    ref(c,-2) +
     ref(c,-3) +
      ref(c,-5) +
       ref(c,-8) +
       ref(c,-13) +
      ref(c,-21) +
     ref(c,-34) +
    ref(c,-55) +
   ref(c,-89) +
  ref(c,-144)) /
 c) *
-1
```

FibboGatto 2

```
mov(((c +
       ref(c,-1) +
        ref(c,-2) +
         ref(c,-3) +
          ref(c,-5) +
           ref(c,-8) +
          ref(c,-13) +
         ref(c,-21) +
        ref(c,-34) +
       ref(c,-55) +
      ref(c,-89) +
     ref(c,-144)) /
    c) *
   -1,
  34,e)
```

FibCMO Indicator

```
(CMO(C,3)+CMO(C,5)+CMO(C,8))/3
```

Fib Levels_In

```
eMonth1:=Input("Enter the Month-MM",1,12,1);
eDate1:=Input("Enter the Date-DD",1,31,1);
eYear1:=Input("Enter the Year-YYYY",0,2100,0);
eMonth2:=Input(".Enter the Month-MM",1,12,1);
eDate2:=Input(".Enter the Date-DD",1,31,1);
eYear2:=Input(".Enter the Year-YYYY",0,2100,0);

h1:=valuewhen(1, dayofmonth()=eDate1 AND month()=eMonth1 AND year()=eYear1,H);
l1:=valuewhen(1, dayofmonth()=eDate1 AND month()=eMonth1 AND year()=eYear1,L);

h2:=valuewhen(1, dayofmonth()=eDate2 AND month()=eMonth2 AND year()=eYear2,H);
```

```
l2:=valuewhen(1, dayofmonth()=eDate2 AND month()=eMonth2 AND year()=eYear2,L);

aa:= Max(h1,h2);
bb:=Min(l1,l2);
cc:=Abs(aa-bb);
startpt:=If(h1>h2 AND l1>l2,l2,If(h2>h1 AND l2>l1,h2,0));

sr1:=If(startpt=l2,l2+(cc*.236),If(startpt=h2,h2-(cc*.236),0));
SR2:=If(startpt=l2,l2+(cc*.3),If(startpt=h2,h2-(cc*.3),0));
SR3:=If(startpt=l2,l2+(cc*.382),If(startpt=h2,h2-(cc*.382),0));
SR4:=If(startpt=l2,l2+(cc*.486),If(startpt=h2,h2-(cc*.486),0));
SR5:=If(startpt=l2,l2+(cc*.618),If(startpt=h2,h2-(cc*.618),0));
SR6:=If(startpt=l2,l2+(cc*.786),If(startpt=h2,h2-(cc*.786),0));

aa;
sr1;
SR2;
SR3;
SR4;
SR5;
SR6;
bb;
```

Fibonacci Ratios and Momentum

Highlights

Name: RSI > 50
Condition: RSI(14) > 50
Color: Dk Green

Name: RSI < 50
Condition: RSI(14) < 50
Color: Red

Symbols

Name : Isolated Low
Graphic : Buy Arrow
Color : Black
Label : Isolated Low
Condition :

LOW < Ref(LOW,-1) AND LOW < Ref(LOW,1)

Name : Isolated High
Graphic : Sell Arrow

Color : Black
Label : Isolated High
Condition :

HIGH > Ref(HIGH,-1) AND HIGH > Ref(HIGH,1)

Final Plot 2 in 1

```
If(BarsSince((

Peak(1,If(L<Ref(LLV(L,4),-1),Ref(HHV(H,4),-1),0),1) <>
Ref(Peak(1,If(L<Ref(LLV(L,4),-1),Ref(HHV(H,4),-1),0),1) ,4)
)) < BarsSince((

Peak(1,If(H>Ref(HHV(H,4),-1),Ref(LLV(L,4),-1),0),1) <>
Ref(Peak(1,If(H>Ref(HHV(H,4),-1),Ref(LLV(L,4),-1),0),1) ,4)
)), {then} Ref(HHV(H,4),-1),{else}Ref(LLV(L,4),-1))
```

Fidelity Select Chemical Fund

```
Mov((Sum(Log(C / Ref(C,-1)),9) - (((9*Sum(Log(C / Ref(C,-1)) *
Log(P / Ref(P,-1)),9)) - (Sum(Log(C / Ref(C,-1)),9) * Sum(Log(P /
Ref(P,-1)) ,9))) / ((9*Sum(Pwr(Log(P / Ref(P,-1)),2),9)) - Pwr(Sum(Log(P/ Ref(P,-1)),9),2)) *
Sum(Log(P / Ref(P,-1)),9))) / 9,12,SIMPLE)
```

Fractal Efficiency %

```
If(C > Ref(C,-9),Sqr( Pwr( ROC(C,9,$),2) +Pwr(10,2)) /
Sum( Sqr( Pwr( ROC(C,1,$),2)+1),9), - Sqr(Pwr( ROC(C,9,$),2) + Pwr(10,2)) /
Sum( Sqr( Pwr( ROC(C,1,$),2)+1),9)) * 100
```

Front Weighted 36 Day Moving Average

1FrontWeighted36BarMA1

```
0.01 * Ref(P,-34) +
0.01 * Ref(P,-33) +
0.01 * Ref(P,-32) +
0.01 * Ref(P,-31) +
0.01 * Ref(P,-30) +
0.01 * Ref(P,-29) +
0.01 * Ref(P,-28) +
0.01 * Ref(P,-27) +
0.01 * Ref(P,-26) +
0.02 * Ref(P,-25) +
0.02 * Ref(P,-24) +
0.02 * Ref(P,-23) +
0.02 * Ref(P,-22) +
0.02 * Ref(P,-21) +
0.02 * Ref(P,-20) +
```

```
0.02 * Ref(P,-19) +
0.02 * Ref(P,-18)
```

2FrontWeighted36BarMA2

```
0.03 * Ref(P,-17) +
0.031 * Ref(P,-16) +
0.031 * Ref(P,-15) +
0.031 * Ref(P,-14) +
0.031 * Ref(P,-13) +
0.031 * Ref(P,-12) +
0.031 * Ref(P,-11) +
0.031 * Ref(P,-10) +
0.031 * Ref(P,-9) +
0.031 * Ref(P,-8) +
0.006 * Ref(P,-7) +
0.006 * Ref(P,-6) +
0.07 * Ref(P,-5) +
0.07 * Ref(P,-4) +
0.07 * Ref(P,-3) +
0.07 * Ref(P,-2)
```

3FrontWeighted36BarMA3

```
0.07 * Ref(P,-1) + 0.079 * P
```

Front Weighted 36 Day Moving Average

```
Fml( "1FrontWeighted36BarMA1" ) +
Fml( "2FrontWeighted36BarMA2" ) +
Fml( "3FrontWeighted36BarMA3" )
```

GANN - Swing

```
Us:=BarsSince((H > Ref(H,-1)) AND (Ref(H,-1) >
Ref(H,-2)));
Ds:=BarsSince((L < Ref(L,-1)) AND (Ref(L,-1)<
Ref(L,-2)));
Sd1:=If(Us=0,
{then}If(Ref(L,-1)<>LowestSince(1,Ds=0,L),
{then}1,
{else}0),
{else}If(Ds=0,
{then}If(Ref(H,-1)<>
HighestSince(1,Us=0,H),
{then}-1,
{else}0),
{else}0));
Sd2:=If(Sd1=1,
{then} If(Ref(BarsSince(Sd1=1),-1) >
```

```
Ref(BarsSince(Sd1=-1),-1),
{then}1,
{else}0),
{else} If(Sd1=-1,
{then}If(Ref(BarsSince(Sd1=1),-1) <
Ref(BarsSince(Sd1=-1),-1),
{then}-1,
{else}0),
{else}0));
TD1:=ValueWhen(1,Sd2<>0,Sd2);
Td1;
```

GANN - Trend

```
Sd:= FmlVar("GANN - Swing","TD1") ;
{Swing Change High}
Sch:=If(Sd=1 AND Ref(sd,-1)=-1,
{then}1,
{else}0);
{Swing Change Low}
Scl:=If(Sd=-1 AND Ref(Sd,-1)=1,
{then}1,
{else}0);
{Peak Value}
Pv:=If(Scl=1,
{then}HighestSince(1,Sch=1,H),
{else}0);
{Trough Value}
Tv:=If(Sch=1,
{then}LowestSince(1,Scl=1,L),
{else}0);
{Trend Direction}
Td:=If(H>ValueWhen(1,Pv>0,Pv),
{then}1,
{else}If(L<ValueWhen(1,Tv>0,Tv),
{then}-1,
{else}0));
{UpTrend=1 DownTrend =-1}
Tdv:=ValueWhen(1,Td<>0,Td);
Tdv
```

GANN Weekly - Swing

```
Dw:=If(DayOfWeek()<=Ref(DayOfWeek(),-1),1,0);
Wh:=If(Dw=1,
{then}Ref(HighestSince(1,Dw=1,H),-1),
{else}0);
Wl:=If(Dw=1,
{then}Ref(LowestSince(1,Dw=1,L),-1),
{else}0);
Hv1:=ValueWhen(1,Wh>0,Wh);
Hv2:=ValueWhen(2,Wh>0,Wh);
```

```
Hv3:=ValueWhen(3,Wh>0,Wh);
Lv1:=ValueWhen(1,Wl>0,Wl);
Lv2:=ValueWhen(2,Wl>0,Wl);
Lv3:=ValueWhen(3,Wl>0,Wl);
Us:=BarsSince((Hv1 > Hv2) AND (Hv2 > Hv3));
Ds:=BarsSince((Lv1 < Lv2) AND (Lv2 <Lv3));
Hc:=Ref(HighestSince(1,Us=0 AND Ref(Us,-1)>0,H),
-1);
Lc:=Ref(LowestSince(1,Ds=0 AND Ref(Ds,-1)>0,L),
-1);
{Swing direction Calculation}
Sd1:=If(Us=0 AND Dw=1,
{then}If((Lv1<>Lc) AND (Lv2<>Lc),
{then}1,
{else}0),
{else}If(Ds=0,
{then}If((Hv1<>Hc) AND (Hv2<>Hc),
{then}-1,
{else}0),
{else}0));
Sd2:=If(Sd1=1,
{then} If(Ref(BarsSince(Sd1=1),-1) >
Ref(BarsSince(Sd1=-1),-1),
{then}1,
{else}0),
{else} If(Sd1=-1,
{then}If(Ref(BarsSince(Sd1=1),-1) <
Ref(BarsSince(Sd1=-1),-1),
{then}-1,
{else}0),
{else}0));
TD1:=ValueWhen(1,Sd2<>0,Sd2);
TD1
```

GANN Weekly - Trend

```
Sd:= FmlVar("GANN Weekly - Swing","TD1") ;
{Swing Change High}
Sch:=If(Sd=1 AND Ref(sd,-1)=-1,
{then}1,
{else}0);
{Swing Change Low}
Scl:=If(Sd=-1 AND Ref(Sd,-1)=1,
{then}1,
{else}0);
{Peak Value}
Pv:=If(Scl=1,
{then}HighestSince(1,Sch=1,H),
{else}0);
{Trough Value}
Tv:=If(Sch=1,
{then}LowestSince(1,Scl=1,L),
{else}0);
```

```
{Trend Direction}
Td:=If(H>ValueWhen(1,Pv>0,Pv),
{then}1,
{else}If(L<ValueWhen(1,Tv>0,Tv),
{then}-1,
{else}0));
{UpTrend=1 DownTrend =-1}
Tdv:=ValueWhen(1,Td<>0,Td);
Tdv
```

GANN - HiLo

```
HLd:=If(CLOSE>Ref(Mov(H,3,S),-1),
{then}1,
{else}If(CLOSE<Ref(Mov(L,3,S),-1),
{then}-1,
{else}0));
HLv:=ValueWhen(1,HLd<>0,HLd);
HiLo:=If(HLv=-1,
{then}Mov(H,3,S),
{else}Mov(L,3,S));
HiLo;
```

GANN - HiVisual & LoVisual

Zero Lag EMA

```
Period:= Input("What Period",1,250,10);
EMA1:= Mov(CLOSE,Period,E);
EMA2:= Mov(EMA1,Period,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA:= EMA1 + Difference;
ZeroLagEMA
```

GANN - Swing HiLow Activator

```
;Ref(Mov(L,3,S),-1)
;Ref(Mov(H,3,S),-1)
```

GAP Days

```
GapUp()
```

GAP Identification

```
if(L,>,ref(H,-1),1, if(H,<,ref(L,-1),-1,0))
```

Gap Study - Minimum

```
MinGap := Input("Minimum gap to consider (%)",-10000,10000,1);
GapIncrement := Input("Gap Increment (%)",0,100,1);
LookingForGapUp := MinGap >= 0; LookingForGapDown := MinGap < 0;
{ Gap percentage }
Gap := (OPEN - Ref(CLOSE,-1))/Ref(CLOSE,-1)*100;
NumGaps := If(LookingForGapUp, Cum(Gap >= MinGap AND
Gap < MinGap + GapIncrement),
If(LookingForGapDown, Cum(Gap <= MinGap AND
Gap > MinGap - GapIncrement),0));
If(LookingForGapUp, Cum(If(Gap >= MinGap AND
Gap < MinGap + GapIncrement, If(CLOSE >= OPEN, +1,0),0)),
If(LookingForGapDown, Cum(If(Gap <= MinGap AND
Gap > MinGap - GapIncrement, If(CLOSE <= OPEN, +1, 0),0)), 0))/NumGaps*100;
```

Gap Study - Increment

```
MinGap := Input("Minimum gap to consider (%)",-10000,10000,1);
GapIncrement := Input("Gap Increment (%)",0,100,1);
LookingForGapUp := MinGap >= 0; LookingForGapDown := MinGap < 0;
{ Gap percentage }
Gap := (OPEN - Ref(CLOSE,-1))/Ref(CLOSE,-1)*100;
NumGaps := If(LookingForGapUp, Cum(Gap >= MinGap AND
Gap < MinGap + GapIncrement),
If(LookingForGapDown, Cum(Gap <= MinGap AND
Gap > MinGap - GapIncrement),0));
If(LookingForGapUp, Cum(If(Gap >= MinGap AND
Gap < MinGap + GapIncrement, If(LOW <=Ref(CLOSE,-1), +1,0),0)),
If(LookingForGapDown, Cum(If(Gap <= MinGap AND
Gap > MinGap - GapIncrement, If(HIGH >=Ref(CLOSE,-1), +1, 0),0)), 0))/NumGaps*100;
```

Gap Study - Down

```
MinGap := Input("Minimum gap to consider (%)",-10000,10000,1);
GapIncrement := Input("Gap Increment (%)",0,100,1);
LookingForGapUp := MinGap >= 0; LookingForGapDown := MinGap < 0;
GapYesterday := (Ref(OPEN,-1) - Ref(CLOSE,-2))/Ref(CLOSE,-2)*100;
NumGapsthruYesterday := If(LookingForGapUp, Cum(GapYesterday >= MinGap AND
GapYesterday <
MinGap + GapIncrement), If(LookingForGapDown, Cum(GapYesterday <= MinGap AND
GapYesterday >
MinGap - GapIncrement),0));
If(LookingForGapUp, Cum(If(GapYesterday >= MinGap AND
GapYesterday < MinGap + GapIncrement,
If(OPEN > Ref(CLOSE,-1), +1,0),0)),
If(LookingForGapDown, Cum(If(GapYesterday<= MinGap AND
GapYesterday > MinGap - GapIncrement,
If(OPEN < Ref(CLOSE,-1), +1, 0),0)), 0))/NumGapsthruYesterday*100;
```

GAP Trading

```
dn:= 1.0;
up:= 1.0;
gap:= 100*(OPEN - Ref(CLOSE, -1))/Ref(CLOSE,-1);
prf:= If(gap>=up, OPEN-CLOSE, If(gap<=-dn,CLOSE-OPEN,0));
Cum(prf);
```

Gopalakrishnan Range Index (GAPO)

```
Log((HHV(High,5))-(LLV(Low,5)))/Log(5)
```

GRII by Eddie Kwong

GRII - F1

```
tsf(C,9)-ref(tsf(C,9),-1)
```

GRII - F2

```
(ref(tsf(C,9),-1)-(ref(tsf(C,9),-2)))
```

GRII - F3

```
(ref(tsf(C,9),-2)-(ref(tsf(C,9),-3)))
```

GRII - F4

```
(tsf(C,9)-ref(tsf(C,9),-1)) +
((ref(tsf(C,9),-1) - ref(tsf(C,9),-2))) +
((ref(tsf(C,9),-2) - (ref(tsf(C,9),-3))))
```

Guppy MMA Oscillator

```
((Mov(CLOSE,3,E)+Mov(CLOSE,5,E) + Mov(CLOSE,8,E)+Mov(CLOSE,10,E) +
Mov(CLOSE,12,E)+Mov(CLOSE,15,E)) - (Mov(CLOSE,30,E)+Mov(CLOSE,35,E) +
Mov(CLOSE,40,E)+Mov(CLOSE,45,E) + Mov(CLOSE,50,E)+Mov(CLOSE,60,E)))*10;
(Mov((Mov(CLOSE,3,E)+Mov(CLOSE,5,E) + Mov(CLOSE,8,E)+Mov(CLOSE,10,E) +
Mov(CLOSE,12,E)+Mov(CLOSE,15,E)) - (Mov(CLOSE,30,E)+Mov(CLOSE,35,E) +
Mov(CLOSE,40,E)+Mov(CLOSE,45,E) + Mov(CLOSE,50,E)+Mov(CLOSE,60,E)),13,E))*10;0;
```

Haeslers ATR

```
prd1:=input("enter ATR period",1,9999,7);
prd2:=(prd1*2)-1;
{max (absolute) of yesterday's close to today'shigh or today's low}
myatr1:=Max(Abs(Ref(C,-1)-H),Abs(Ref(C,-1)-L));
{max of yesterday's close to today's highor today's low or today's range}
myatr2:=Max(myatr1,H-L);
myatr2
```

Haurlan Index - NYSE

```
;Mov(  ( ( Security("X.NYSE-A",O) ) - ( Security("X.NYSE-D",O) ) ),3 ,E)
;Mov(  ( ( Security("X.NYSE-A",O) ) - ( Security("X.NYSE-D",O) ) ),20 ,E)
;Mov(  ( ( Security("X.NYSE-A",O) ) - ( Security("X.NYSE-D",O) ) ),200 ,E)
```

HHRWI

```
Max( (Ref(HIGH,-1) - LOW) / ( (Ref(Sum( ATR( 1 ),2),-1) / 2) * Sqrt( 2 ) ),
Max( (Ref(HIGH,-2) - LOW) / ( (Ref(Sum( ATR( 1 ),3),-1) / 3) * Sqrt( 3 ) ),
Max( (Ref(HIGH,-3) - LOW) / ( (Ref(Sum( ATR( 1 ),4),-1) / 4) * Sqrt( 4 ) ),
Max( (Ref(HIGH,-4) - LOW) / ( (Ref(Sum( ATR( 1 ),5),-1) / 5) * Sqrt( 5 ) ),
Max( (Ref(HIGH,-5) - LOW) / ( (Ref(Sum( ATR( 1 ),6),-1) / 6) * Sqrt( 6 ) ),
Max( (Ref(HIGH,-6) - LOW) / ( (Ref(Sum( ATR( 1 ),7),-1) / 7) * Sqrt( 7 ) ),
Max( (Ref(HIGH,-7) - LOW) / ( (Ref(Sum( ATR( 1 ),8),-1) / 8) * Sqrt( 8 ) ),
(Ref(HIGH,-8) - LOW) / ( (Ref(Sum( ATR( 1 ),9),-1) / 9) * Sqrt( 9 ) )
) ) ) ) ) ) )
```

High - Low

```
Len:=Input("Periods",1,400,89);
(Mov((H - L + Abs(H - Ref(C,-1)) + Abs(L -Ref(C,-1)) ),len,E))/2
```

High Low Wave - Daily

```
if(H,>,ref(hhv(H,100),-1),1,if(L,<,ref(llv(L,100),-1),-1,0))
```

High-Low Range on RTH Charts

```
MktStart:=Hour()<Ref(Hour(),-1);
yestHiVal:=ValueWhen(1,MktStart,
Ref(HighestSince(1,MktStart,H),-1));
yestLoVal:=ValueWhen(1,MktStart,
Ref(LowestSince(1,MktStart,L),-1));
yestHiVal-yestLoVal
```

Hilbert Squelch Indicator by John Ehlers

Hilbert cycle period - 1a

```
value1:=((H+L)/2) - Ref(((H+L)/2),-6);
value2:= Ref(value1,-3);
value3:=0.75*(value1-Ref(value1,-6)) + 0.25*(Ref(value1,-2)-Ref(value1,-4));
inphase:= 0.33 * value2 + (0.67 * PREV);
quad:= 0.2 * value3 + ( 0.8 * PREV);
```

```
p1:=Atan(Abs(quad+Ref(quad,-1)),Abs(inphase+Ref(inphase,-1)));
phase:=If(inphase<0 AND quad>0, 180-p1,
If(inphase<0 AND quad<0, 180+p1,
If(inphase>0 AND quad<0, 360-p1,p1)));
dp:=If(Ref(phase,-1)<90 AND phase>270, 360+Ref(phase,-1)-phase,Ref(phase,-1)-phase);
dp2:=If(dp < 1, 1,
If(dp > 60, 60, dp));
dp2
```

H cycle count 1a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,6)>=360 AND Sum(value,5)<360 ,6,0) +
If(Sum(value,7)>=360 AND Sum(value,6)<360 ,7,0) +
If(Sum(value,8)>=360 AND Sum(value,7)<360 ,8,0) +
If(Sum(value,9)>=360 AND Sum(value,8)<360 ,9,0) +
If(Sum(value,10)>=360 AND Sum(value,9)<360 ,10,0) +
If(Sum(value,11)>=360 AND Sum(value,10)<360 ,11,0) +
If(Sum(value,12)>=360 AND Sum(value,11)<360 ,12,0) +
If(Sum(value,13)>=360 AND Sum(value,12)<360 ,13,0) +
If(Sum(value,14)>=360 AND Sum(value,13)<360 ,14,0) +
If(Sum(value,15)>=360 AND Sum(value,14)<360 ,15,0)
```

H cycle count 2a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,16)>=360 AND Sum(value,15)<360 ,16,0) +
If(Sum(value,17)>=360 AND Sum(value,16)<360 ,17,0) +
If(Sum(value,18)>=360 AND Sum(value,17)<360 ,18,0) +
If(Sum(value,19)>=360 AND Sum(value,18)<360 ,19,0) +
If(Sum(value,20)>=360 AND Sum(value,19)<360 ,20,0) +
If(Sum(value,21)>=360 AND Sum(value,20)<360 ,21,0) +
If(Sum(value,22)>=360 AND Sum(value,21)<360 ,22,0) +
If(Sum(value,23)>=360 AND Sum(value,22)<360 ,23,0) +
If(Sum(value,24)>=360 AND Sum(value,23)<360 ,24,0) +
If(Sum(value,25)>=360 AND Sum(value,24)<360 ,25,0)
```

H cycle count 3a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,26)>=360 AND Sum(value,25)<360 ,26,0) +
If(Sum(value,27)>=360 AND Sum(value,26)<360 ,27,0) +
If(Sum(value,28)>=360 AND Sum(value,27)<360 ,28,0) +
If(Sum(value,29)>=360 AND Sum(value,28)<360 ,29,0) +
If(Sum(value,30)>=360 AND Sum(value,29)<360 ,30,0) +

If(Sum(value,31)>=360 AND Sum(value,30)<360 ,31,0) +
If(Sum(value,32)>=360 AND Sum(value,31)<360 ,32,0) +
If(Sum(value,33)>=360 AND Sum(value,32)<360 ,33,0) +
If(Sum(value,34)>=360 AND Sum(value,33)<360 ,34,0) +
```

If(Sum(value,35)>=360 AND Sum(value,34)<360 ,35,0)

Hilbert cycle period - final-a

c1:= Fml("H cycle count 1a") + Fml("H cycle count 2a") + Fml("H cycle count 3a") ;
c2:=If(c1=0,PREV,c1);
(0.25*c2) + (0.75*PREV)

Historical Volatility 10 day

Std(Log(C/Ref(C,-1)),10)*Sqrt(365)*100

Historical Volatility 100 day

Std(Log(C/Ref(C,-1)),100)*Sqrt(365)*100

Historical Volatility Indicator

Std(Log(C/Ref(C,-1)),10)/Std(Log(C/Ref(C,-1)),100)

Ichimoku Chart

ST:=(HHV(H,26)+LLV(L,26))/2;
TL:=(HHV(H,9)+LLV(L,9))/2;
DL:=Ref(C,+25);
1Span:=Ref((ST+TL)/2,-25);
2Span:=Ref((HHV(H,52)+LLV(L,52))/2,-25);

ST;
TL;
DL;
1Span;
2Span

IFT - Intelligent Futures Trading by Chick Goslin

IFT-Confirming Line - Chick Goslin

{Intelligent Futures Trading - Chick Goslin
Trend's intermediate/Mid-term line -13 can be replaced by up to 17 days}

Mov(C-Mov(C,3,S),13,S)

{This indicator is copyrighted by and propriety of Ton Maas - Amsterdam - the Netherlands}

IFT-Direction Line - Chick Goslin

{Intelligent Futures Trading - Chick Goslin
Trend's directional line}

Mov(C,49,E)

{This indicator is copyrighted by and propriety of Ton Maas - Amsterdam - the Netherlands}

IFT-Timing Line - Chick Goslin

{Intelligent Futures Trading - Chick Goslin
trend's short term line - the tricker-line}

```
C-Mov(C,3,S)
```

{This indicator is copyrighted by and propriety of Ton Maas - Amsterdam - the Netherlands}

IFT - 48 Turnaround Line - Chick Goslin

{based on ideas gotten from Chicks book - INTELLIGENT FUTURES TRADING,
published 1997 by Windsor Books, POBox 280, Brightwaters, NY 11718,
and published in TAM Dutch TA-magazine, Jun98}

```
MTMidM1:= Input("MidTerm periods MEDIAN price x-days ago", 1,1000,47);
MTMidM2:= Input("MidTerm periods MEDIAN price x-days ago", 1,1000,48);
MTMidSMO:= Input("ShortTerm SMOOTHING periods MEDIAN price", 1,1000,1);
Mov(
 ((Ref(MP(),-MTMidM1)/2.1) + (Ref(MP(),-MTMidM2))/1.9),
   MTMidSMO,S)
```

{This indicator is copyrighted by and propriety of Ton Maas - Amsterdam - the Netherlands}

IFT- TREND UP SIGNAL SHORT TERM

{Binairy Wave, 1 = long and 0 = short}

```
If(Mov(C-Mov(C,3,S),13,S)>
Mov(Mov(C-Mov(C,3,S),13,S),15,E),+1,-1)
```

{This indicator is copyrighted by and propriety of Ton Maas - Amsterdam - the Netherlands}

IFT-CONFIRMATION of trend-Chick Goslin-Bi-wave

{Binairy Wave, 1 = long and 0 = short}

```
If(Mov(C-Mov(C,3,S),13,S)>
Mov(Mov(C-Mov(C,3,S),13,S),50,S),+3,-3)
```

{This indicator is copyrighted by and propriety of Ton Maas - Amsterdam - the Netherlands}

Inertia 2 in 1

```
Mov( ((100 * Mov( If(HIGH > Ref(HIGH,-1), Std(HIGH,10),0),14,E) /
(Mov( If(HIGH > Ref(HIGH,-1), Std(HIGH,10), 0),14,E)+
Mov(If(HIGH < Ref(HIGH,-1), Std(HIGH,10),0),14,E)) +
100 * Mov( If(LOW > Ref(LOW,-1), Std(LOW,10),0),14,E) /
(Mov( If(LOW > Ref(LOW,-1), Std(LOW,10), 0),14,E)+
```

```
Mov(If(LOW < Ref(LOW,-1), Std(LOW,10), 0),14,E)))/ 2),20,SIMPLE)
```

Instantaneous Trend Line

```
pr:=(H+L)/2;
(Fml("H TL sum 1") + Fml("H TL sum 2") + Fml("H TL sum 3"));
0.33*(pr + (0.5*(pr-Ref(pr,-3)))) + (0.67*PREV)
```

Sinewave Indicator

```
pd:=Int(Fml("Hilbert cycle period - final-a"));
cp:=Fml("Hilbert cycle period - final-a");
ip:=Fml( "H ip sum 1") + Fml( "H ip sum 2") +
Fml( "H ip sum 3");
rp:=Fml( "H rp sum 1") + Fml( "H rp sum 2") +
Fml( "H rp sum 3");
dc1:=If(Abs(ip)>0.001, Atan(rp/ip,1), 90*If(rp>=0,1,-1));
dc2:=If(ip<0, dc1+270, dc1+90);
dcp:=If(dc2>315, dc2-360, dc2);
Sin(dcp);
Sin(dcp+45)
```

InSync Index - One Formula

```
50
+ (If(CCI(14), > , 100, 5, If(CCI(14),<,-100, -5, 0)))
+ (If((C-( Mov(C,20,S) - 2 * (Std(C ,20)))) /
        (Mov(C,20,S) + 2 * (Std(C ,20))) -
        (Mov(C,20,S) - 2 * (Std(C, 20))), < ,.05, -5,
  If((C-( Mov(C,20,S) - 2 * (Std(C ,20)))) /
        (Mov(C,20,S) + 2 * (Std(C ,20))) -
        (Mov(C,20,S)- 2 * (Std(C ,20))), > , .95, 5, 0)))
+ (If(RSI(14), > ,80,5,If(RSI(14), < ,20,-5,0)))
+ (If(Stoch(14,1), > ,80,5,If(Stoch(14,1), <,20,-5,0)) )
+ (If(Stoch(14,3), > ,80, 5, If(Stoch(14,3), < , 20, -5,0)) )
+ (If(MFI(20), > ,80,5,If(MFI(20), < ,20,-5,0)))
+ (If(EMV(10,S) - Mov(EMV(10,S),10,S), < ,0,
  If(Mov(EMV(10,S),10,S), < , 0, -5, 0),0))
+ (If(EMV(10,S) - Mov(EMV(10,S),10,S), > ,0,
  If(Mov(EMV(10,S),10,S) , > ,0, 5, 0),0) )
+ (If(ROC(C , 10, $) - Mov(ROC(C,10,$), 10,S), > , 0,
  If(Mov(ROC(C,10,$), 10,S),> ,0,5,0),0))
+ (If(ROC(C , 10, $) - Mov(ROC(C,10,$), 10,S) ,< , 0,
  If(Mov(ROC(C,10,$),10,S),< ,0,-5,0),0) )
+ (Ref((If(DPO(18) - Mov(DPO(18), 10, S), > , 0,
      If(Mov(DPO(18),10,S), > , 0, 5, 0), 0)),-10) )
+ (Ref((If(DPO(18) - Mov(DPO(18), 10, S),< , 0,
      If(Mov(DPO(18),10,S), < , 0, -5, 0), 0)),-10) )
+ (If(MACD() - Mov(MACD(), 10, S), > , 0,
  If(Mov(MACD(),10, S), > , 0, 5, 0), 0))
```

```
+ (If(MACD() - Mov(MACD(), 10, S), < ,0,
   If(Mov(MACD(),10,S), < , 0, -5, 0), 0))
```

Investor Preference Index

```
(Sum(
Mov(ROC(Log(C),24,%) - ROC(Log(P),24,%),15,S) -
Mov(ROC(Log(C),24,%) - ROC(Log(P),24,%),38,S),54)+1)*100
```

J2L by Jean-Louis Lepreux

J2L

```
Period:= Input("What Period",5,100,50);
TSF( CLOSE,period) - LinearReg( CLOSE,period)
```

Jack Landis Formula's

Landis Multiple Time Periods Formula #1

```
mov(((Stoch(8,3)*.05)+(Stoch(89,21)*.43)+(Stoch(55,13)*.26)+
(Stoch(34,8)*.16)+(Stoch(21,5)*.10)),15,s)
```

Landis Multiple Time Periods Formula #2

```
mov(((Stoch(8,3)*.05)+(Stoch(89,21)*.43)+(Stoch(55,13)*.26)+
(Stoch(34,8)*.16)+(Stoch(21,5)*.10)),10,s)
```

Landis Multiple Time Periods Formula #3

```
mov(((Stoch(8,3)*.05)+(Stoch(89,21)*.43)+(Stoch(55,13)*.26)+
(Stoch(34,8)*.16)+(Stoch(21,5)*.10)),5,s)
```

Landis Multiple Time Periods Formula #4

```
mov(((Stoch(8,3)*.05)+(Stoch(89,21)*.43)+(Stoch(55,13)*.26)+
(Stoch(34,8)*.16)+(Stoch(21,5)*.10)),2,s)
```

Multiple Slopes of Landis Formula #1

```
linregslope(mov(((Stoch(8,3)*.05)+(Stoch(89,21)*.43)+
(Stoch(55,13)*.26)+(Stoch(34, 8)*.16)+(Stoch(21,5)*.10)),15,s),2)
```

Multiple Slopes of Landis Formula #2

```
linregslope(mov(((Stoch(8,3)*.05)+(Stoch(89,21)*.43)+
```

(Stoch(55,13)*.26)+(Stoch(34, 8)*.16)+(Stoch(21,5)*.10)),10,s),2)

Multiple Slopes of Landis Formula #3

```
linregslope(mov(((Stoch(8,3)*.05)+(Stoch(89,21)*.43)+
(Stoch(55,13)*.26)+(Stoch(34,8)*.16)+(Stoch(21,5)*.10)),5,s),2)
```

JKL Moving Average

```
n1:=Input("Okres",3,50,5);
(Sum(Stdev(CLOSE,n1)*CLOSE,n1))/(Sum(Stdev(CLOSE,n1),n1))
```

JKL Oscillator

```
ok1:=Input("Okres krótki",3,10,5);
ok2:=Input("Okres długi",11,20,15);
l1:=Input("Linia sygnału",-50,50,0);
fl:=Stdev((OPEN+CLOSE)/2,ok1)*((OPEN+CLOSE)/2);
sl:=Sum(Stdev((OPEN+CLOSE)/2,ok1),ok1);
tl:=Sum(fl,ok1);
a:=tl/sl;
b:=Mov(tl/sl,ok2,SIMPLE);
Ref(((a-b)*1000)/((OPEN+CLOSE)/2),2);
l1
```

JKL

```
n1:=Input("Okres krótki",3,10,5);
n2:=Input("Okres długi",11,30,15);
l1:=Input("Linia sygnału",-50,50,0);
fl:=Stdev((OPEN+CLOSE)/2,n1)*((OPEN+CLOSE)/2);
sl:=Sum(Stdev((OPEN+CLOSE)/2,n1),n1);
tl:=Sum(fl,n1);
a:=tl/sl;
b:=Mov(tl/sl,n2,SIMPLE);
a-b;
l1
```

Kaleidoscope - CCT

```
LinRegSlope(C,13)+100 * ( Mov( Mov( ROC(C,1,$),34,E),21,E) /
Mov( Mov( Abs( ROC(C,1,$)),34,E),21,E))+100 *
( Mov( Mov(C - (.5 * ( HHV(H,13) + LLV(L,13))),21,E),3,E) /
(.5*Mov( Mov( HHV(H,13) - LLV(L,13),21,E),3,E)))
```

Kaufman's Adaptive Moving Average I

```
Periods := Input("Time Periods",1,1000, 10);
Direction := CLOSE - Ref(CLOSE,-periods);
Volatility := Sum(Abs(ROC(CLOSE,1,$)),periods);
ER := Abs(Direction/Volatility);
```

```
FastSC := 2/(2 + 1);
SlowSC := 2/(30 + 1);
SSC := ER * (FastSC - SlowSC) + SlowSC;
Constant := Pwr(SSC,2);
AMA := If(Cum(1) = periods +1, ref(Close,-1)+ constant * (CLOSE- ref(Close,-1)),Prev + constant *
(CLOSE - PREV));
AMA
```

Kaufman's Adaptive Moving Average Binary Wave

```
Periods := Input("Time Periods",1,1000, 10);
Direction := CLOSE - Ref(Close,-periods);
Volatility := Sum(Abs(ROC(CLOSE,1,$)),periods);
ER := Abs(Direction/Volatility);
FastSC := 2/(2 + 1);
SlowSC := 2/(30 + 1);
SSC := ER * (FastSC - SlowSC) + SlowSC;
Constant := Pwr(SSC,2);
AMA := If(Cum(1) = periods +1, ref(Close,-1)+ constant * (CLOSE- ref(Close,-1)),Prev + constant *
(CLOSE - PREV));
FilterPercent := Input("Filter Percentage",0,100,15)/100;
Filter := FilterPercent * Std(AMA - Ref(AMA,-1),Periods);
AMALow := If(AMA < Ref(AMA,-1),AMA,PREV);
AMAHigh := If(AMA > Ref(AMA,-1),AMA,PREV);
If(AMA - AMALow > Filter, 1 {Buy Signal},If(AMAHigh - AMA > Filter, -1 {Sell Signal}, 0 {No_Signal}))
```

Kaufman’s Adaptive Moving Average II

```
{ Kaufman AMA indicator }
PriceSeries:=Input("Prices series - 0:O|1:H|2:L|3:C",0,3,3);
Periods:=Input("Periods",1,32767,10);
FEndF:=Input("Fast end factor",0,1,0.666);
SEndF:=Input("Slow end factor",0,1,0.0645);
Pr:=If(PriceSeries=0,OPEN,If(PriceSeries=1,HIGH,If(PriceSeries=2,LOW,CLOSE)));
Signal:=Abs(Pr-Ref(Pr,-Periods));
Dnoise:=Abs(Pr-Ref(Pr,-1));
Noise:=Sum(Dnoise,Periods);
EffRatio:=If(Noise>0.,Signal/Noise,0.);
FERatio:=FEndF*EffRatio+SEndF*(1-EffRatio);
SmoothF:=Power(FERatio,2);
PKAMA:=Pr*SmoothF+(1-SmoothF)*PREV;
PKAMA;
```

Kaufman's Moving Average

```
Day:=Cum(1)+1;
Z:=Input("Periods",2,1000,5);
MV:=(1/Z);
If(Day<(Z+2),C,If(day=(Z+2),Mov(C,LastValue(Z),S),PREV+(MV*(C-PREV))))
```

Kaufman's Effectivity Mode

```
Abs((C-Ref(C,-10))) /
((Abs(C-Ref(C,-1))) + (Abs(Ref(C,-1)-Ref(C,-2)) +
  Abs(Ref(C,-2)-Ref(C,-3)) + Abs(Ref(C,-3)-Ref(C,-4)) +
  Abs(Ref(C,-4)-Ref(C,-5)) + Abs(Ref(C,-5)-Ref(C,-6)) +
  Abs(Ref(C,-6)-Ref(C,-7)) + Abs(Ref(C,-7)-Ref(C,-8)) +
  Abs(Ref(C,-8)-Ref(C,-9)) + Abs(Ref(C,-9)-Ref(C,-10))))
```

Kaufman's Effectivity - 2 in 1

```
Okres:=Input("Okres",3,100,15);
Speed:=Abs(CLOSE-Ref(CLOSE,-okres));
Volat:=Sum((Abs(CLOSE-Ref(CLOSE,-1))),okres);
Speed/volat
```

Keltner Bands - ATR

```
Pds1:= Input("EMA Periods?",1,100,20);
Pds2:= Input("ATR Periods?",1,100,10);
Mult:= Input("ATR Multiple?",1,10,2.5);
EMA:= Mov(C, Pds1, E);
Diff:= ATR(Pds2) * Mult;
UBand:= EMA + Diff;
LBand:= EMA - Diff;
Ema;
UBand;
LBand;
```

Keltner Channels

```
qwe:= Input("Wartość średniej  -",2,50,10);
;Mov( (H+L+C)/3, qwe, S) + Mov((H-L),qwe,S) {UpperKeltner Band}
;Mov( (H+L+C)/3, qwe, S) {The 10-DayMoving Average}
;Mov( (H+L+C)/3, qwe, S) - Mov((H-L),qwe,S) {LowerKeltner Band}
```

Kendall Indicator

```
periods1:=Input("Periods of ROC",2,50,12);
periods2:=Input("Smoothing Period",1,50,1);
Input("horizontal line 1",-50,50,5);
Input("horizontal line 2",-50,50,-5);
Mov(ROC(C,periods1,%),periods2,S);
```

Ken Roberts' 12 Month High/Low (Contract)

```
If(Highest(High)>Ref(Highest(High),-1),+ 1,If(Lowest(Low)<Ref(Lowest(Low),-1),-1,0))
```

Ken Roberts' 12 Month High/Low (Continuous)

```
If(HHV(High,252)>Ref(HHV(High,252),-1),+1,If(LLV(Low,252)<Ref(LLV(Low,252),-1),-1,0))
```

KST Daily - Simple Moving Average

```
(Mov(Roc(C,10,%),10,S)*1) + (Mov(Roc(C,15,%),10,S)*2) +
(Mov(Roc(C,20,%),10,S)*3) + (Mov(Roc(C,30,%),15,S)*4)
```

KST Long-Term Monthly - Simple Moving Average

```
( (Mov(Roc(C,9,%),6,S)*1) + (Mov(Roc(C,12,%),6,S)*2) +
  (Mov(Roc(C,18,%),6,S)*3) + (Mov(Roc(C,24,%),9,S)*4) ) / 4
```

KST Intermediate - Simple Moving Average

```
(Mov(Roc(C,10,%),10,S)*1) + (Mov(Roc(C,13,%),13,S)*2) +
(Mov(Roc(C,15,%),15,S)*3) + (Mov(Roc(C,20,%),20,S)*4)
```

KST Intermediate - Exponential Moving Average

```
(Mov(Roc(C,10,%),10,E)*1) + (Mov(Roc(C,13,%),13,E)*2) +
(Mov(Roc(C,15,%),15,E)*3) + (Mov(Roc(C,20,%),20,E)*4)
```

KST Long-Term - Exponential Moving Average

```
(Mov(Roc(C,39,%),26,E)*1) + (Mov(Roc(C,52,%),26,E)*2) +
(Mov(Roc(C,78,%),26,E)*3) + (Mov(Roc(C,109,%),39,E)*4)
```

KST Short-Term - Weekly Exponential Moving Average

```
(Mov(Roc(C,3,%),3, E)*1) + (Mov(Roc(C,4,%),4, E)*2) +
(Mov(Roc(C,6,%),6, E)*3) + (Mov(Roc(C,10,%),8, E)*4)
```

KST SST

```
((Mov(Roc(C,10,%),10,S)*1) + (Mov(Roc(C,15,%),10,S)*2) +
 (Mov(Roc(C,20,%),10,S)*3) + (Mov(Roc(C,30,%),15,S)*4))/10
```

KST SMT

```
((Mov(Roc(C,50,%),50,S)*1) + (Mov(Roc(C,65,%),65,S)*2) +
 (Mov(Roc(C,75,%),75,S)*3) + (Mov(Roc(C,100,%),100,S)*4))/10
```

Kurtosis Indicator

```
KP:= Input("Kurtosis Period -",1,30,3);
FK:= Input("Fast Kurtosis -",1,500,50);
FSK:= Input("Fast/Slow Kurtosis -",1,50,6);
Mov(Mov(Mo(KP)-Ref(Mo(4),-1),FK,E),FSK,S)
```

John Kosar

```
Oh:=OPEN-HIGH;
Lc:=LOW-CLOSE;
```

Abs(Oh-Lc);

Largest Negative Change in Close

llv(roc(C,1,$),40)

Last Trough of MMA Convergence

Short/Long Term MMA Convergence

{This indicator sums the total absolute value of the differences between all moving averages used in the Multiple Moving Average (MMA) template. This metric should provide a buy AND sell signal when it reaches a relative minimum and starts to move up. }

```
{Short Term Moving Averages}
3ema := Mov(C,3,E);
5ema := Mov(C,5,E);
8ema := Mov(C,8,E);
10ema := Mov(C,10,E);
12ema := Mov(C,12,E);
15ema := Mov(C,15,E);
{ Long Term Moving Averages}
30ema := Mov(C,30,E);
35ema := Mov(C,35,E);
40ema := Mov(C,40,E);
45ema := Mov(C,45,E);
50ema := Mov(C,60,E);
{Cumulative Absolute Error, 30ema as baseline}
(Abs((3ema - 30ema)/30ema) +
Abs((5ema - 30ema)/30ema) +
Abs((8ema - 30ema)/30ema) +
Abs((10ema - 30ema)/30ema) +
Abs((12ema - 30ema)/30ema) +
Abs((15ema - 30ema)/30ema) +
Abs((35ema - 30ema)/30ema) +
Abs((40ema - 30ema)/30ema) +
Abs((45ema - 30ema)/30ema) +
Abs((50ema - 30ema)/30ema)
)*100
```

Last Trough of MMA Convergence

```
Trough(
1,Fml("Short/Long Term MMA Convergence " ),
2
)
```

Late Start 3 EMA

days:=Input("StartDays",1,5000,50);

```
launch:=Cum(1)>days;
Id:=Mov(C,3,E);
If(Cum(1)>launch,id,RSI(days+1))
```

Linear Regression

```
((15*(sum(cum(1)*C,10))-(sum(cum(1),10)*(sum(C,10)))) /
((10*sum(pwr(cum(1),2),10))-pwr(sum(cum(1),2),10))-pwr(sum(cum(1),10),2))
```

Linear Regression (14)

```
(14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14)* Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)) *
Cum(1) + (Mov(C,14,S) - Mov(Cum(1),14,S) *
(14 * Sum(Cum(1) * C,14) - Sum(Cum(1),14) * Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)))
```

Linear Regression Channel

```
DLR:= Input("Długość Regresji Liniowej -",10,100,55);
DOSt:= Input("Długość Odchylenia Standardowego -",5,50,20);
;LinearReg( CLOSE ,DLR ) + ( 2 * ( Std( C,20 ))) {Up}
;LinearReg( CLOSE ,DLR ) - ( 2 * ( Std( C,20 ))) {Down}
```

Linear Reg. Line Motion #1

```
Pe:=Input("Periods",3,1000,10);
(LastValue(LinearReg(C,Pe))-
(LastValue(LinRegSlope(C,Pe))*
(LastValue(Cum(1))-Cum(1))))+
Ref(C,(0-(LastValue(Cum(1))-Pe)))-
Ref(C,(0-(LastValue(Cum(1))-Pe)));
Ref((LastValue(Ref(LinearReg(C,Pe),-1))-
(LastValue(Ref(LinRegSlope(C,Pe),-1))*
(LastValue(Ref(Cum(1),-1))-Ref(Cum(1),-1))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-1))-Pe+1)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-1))-Pe+1))),1);
Ref((LastValue(Ref(LinearReg(C,Pe),-2))-
(LastValue(Ref(LinRegSlope(C,Pe),-2))*
(LastValue(Ref(Cum(1),-2))-Ref(Cum(1),-2))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-2))-Pe+2)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-2))-Pe+2))),2);
Ref((LastValue(Ref(LinearReg(C,Pe),-3))-
(LastValue(Ref(LinRegSlope(C,Pe),-3))*
(LastValue(Ref(Cum(1),-3))-Ref(Cum(1),-3))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-3))-Pe+3)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-3))-Pe+3))),3);
Ref((LastValue(Ref(LinearReg(C,Pe),-4))-
(LastValue(Ref(LinRegSlope(C,Pe),-4))*
(LastValue(Ref(Cum(1),-4))-Ref(Cum(1),-4))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-4))-Pe+4)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-4))-Pe+4))),4);
```

```
Ref((LastValue(Ref(LinearReg(C,Pe),-5))-
(LastValue(Ref(LinRegSlope(C,Pe),-5))*
(LastValue(Ref(Cum(1),-5))-Ref(Cum(1),-5))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-5))-Pe+5)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-5))-Pe+5))),5);
Ref((LastValue(Ref(LinearReg(C,Pe),-6))-
(LastValue(Ref(LinRegSlope(C,Pe),-6))*
(LastValue(Ref(Cum(1),-6))-Ref(Cum(1),-6))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-6))-Pe+6)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-6))-Pe+6))),6);
Ref((LastValue(Ref(LinearReg(C,Pe),-7))-
(LastValue(Ref(LinRegSlope(C,Pe),-7))*
(LastValue(Ref(Cum(1),-7))-Ref(Cum(1),-7))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-7))-Pe+7)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-7))-Pe+7))),7);
Ref((LastValue(Ref(LinearReg(C,Pe),-8))-
(LastValue(Ref(LinRegSlope(C,Pe),-8))*
(LastValue(Ref(Cum(1),-8))-Ref(Cum(1),-8))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-8))-Pe+8)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-8))-Pe+8))),8);
Ref((LastValue(Ref(LinearReg(C,Pe),-9))-
(LastValue(Ref(LinRegSlope(C,Pe),-9))*
(LastValue(Ref(Cum(1),-9))-Ref(Cum(1),-9))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-9))-Pe+9)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-9))-Pe+9))),9)
```

Linear Regression Line Motion #2

```
Pe:=Input("Periods",3,1000,10);
Ref((LastValue(Ref(LinearReg(C,Pe),-10))-
(LastValue(Ref(LinRegSlope(C,Pe),-10))*
(LastValue(Ref(Cum(1),-10))-Ref(Cum(1),-10))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-10))-Pe+10)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-10))-Pe+10))),10);
Ref((LastValue(Ref(LinearReg(C,Pe),-11))-
(LastValue(Ref(LinRegSlope(C,Pe),-11))*
(LastValue(Ref(Cum(1),-11))-Ref(Cum(1),-11))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-11))-Pe+11)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-11))-Pe+11))),11);
Ref((LastValue(Ref(LinearReg(C,Pe),-12))-
(LastValue(Ref(LinRegSlope(C,Pe),-12))*
(LastValue(Ref(Cum(1),-12))-Ref(Cum(1),-12))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-12))-Pe+12)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-12))-Pe+12))),12);
Ref((LastValue(Ref(LinearReg(C,Pe),-13))-
(LastValue(Ref(LinRegSlope(C,Pe),-13))*
(LastValue(Ref(Cum(1),-13))-Ref(Cum(1),-13))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-13))-Pe+13)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-13))-Pe+13))),13);
Ref((LastValue(Ref(LinearReg(C,Pe),-14))-
(LastValue(Ref(LinRegSlope(C,Pe),-14))*
(LastValue(Ref(Cum(1),-14))-Ref(Cum(1),-14))))+
```

```
Ref(C,(0-(LastValue(Ref(Cum(1),-14))-Pe+14)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-14))-Pe+14))),14);
Ref((LastValue(Ref(LinearReg(C,Pe),-15))-
(LastValue(Ref(LinRegSlope(C,Pe),-15))*
(LastValue(Ref(Cum(1),-15))-Ref(Cum(1),-15))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-15))-Pe+15)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-15))-Pe+15))),15);
Ref((LastValue(Ref(LinearReg(C,Pe),-16))-
(LastValue(Ref(LinRegSlope(C,Pe),-16))*
(LastValue(Ref(Cum(1),-16))-Ref(Cum(1),-16))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-16))-Pe+16)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-16))-Pe+16))),16);
Ref((LastValue(Ref(LinearReg(C,Pe),-17))-
(LastValue(Ref(LinRegSlope(C,Pe),-17))*
(LastValue(Ref(Cum(1),-17))-Ref(Cum(1),-17))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-17))-Pe+17)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-17))-Pe+17))),17);
Ref((LastValue(Ref(LinearReg(C,Pe),-18))-
(LastValue(Ref(LinRegSlope(C,Pe),-18))*
(LastValue(Ref(Cum(1),-18))-Ref(Cum(1),-18))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-18))-Pe+18)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-18))-Pe+18))),18);
Ref((LastValue(Ref(LinearReg(C,Pe),-19))-
(LastValue(Ref(LinRegSlope(C,Pe),-19))*
(LastValue(Ref(Cum(1),-19))-Ref(Cum(1),-19))))+
Ref(C,(0-(LastValue(Ref(Cum(1),-19))-Pe+19)))-
Ref(C,(0-(LastValue(Ref(Cum(1),-19))-Pe+19))),19)
```

Linear Regression Slope

```
nio:=Input("Number of points taken to calculate the ROCs",3,1000,14);

rll:=ROC(O,nio-1,%)/(nio-1);
rl:=ROC(O,nio,%)/nio;
rh:=ROC(O,nio+1,%)/(nio+1);
rhh:=ROC(O,nio+2,%)/(nio+2);

xio:=Input("Distances of ROCs from interpolation point XIO ",0.01,1,0.5);

rit:=(rll / (1+xio) +
  rl / (xio+.0001)+
  rh / (1-xio) +
  rhh / (2-xio)) /
( 1 / (1+xio) + 1 / (xio+.0001) + 1 / (1-xio) + 1 / (2-xio));

ro:=LinRegSlope(LinRegSlope(rit,nio),nio);
ro
```

LinRegOscillator - CCT

```
(LinearReg(C,13)/Ref(LinearReg(C,13),-13))-1
```

Lone Ranger

```
(((HHV(c,3) - LLV(c,3)) / V) - Ref(((HHV(c,3) - LLV(c,3)) / V),-5)) * - 1
```

Long Binary Wave

```
(if((C-L)/(H-L),>,.66 ,1, if((C-L)/(H-L),<,.38,-1,0))) +
(if(ref(oscp(3,15,S,%),-1),<,0,1,0)) +
(if(oscv(1,50,S,%),>,50,1,0)) +
(if((mov(H-L,1,S)/mov(H-L,20,S)),>=,1.00,1,0))
```

Long Binary Wave II

```
(if((C-L)/(H-L),>,.66 ,1, if((C-L)/(H-L),<,.38,-1,0))) +
(if(oscv(1,50,S,%),>,50,1,0)) +
(if((mov(H-L,1,S)/mov(H-L,20,S)),>=,1.00,1,0))+
(if(ref(stoch(14,3),-1),<,65,1, if(stoch(14,3),<,65,1,0)))
```

LSS Oscillator and Pivot Point

LSS 5 Day Osc

```
X:=HHV(H,5)-Ref(O,-5);
Y:=C-LLV(L,5);
LSS:=100*(X+Y)/(HHV(H,5)-LLV(L,5))*2;
LSS;
```

LLS 5 DAY Osc Diff from 3 Day Osc

```
X:=HHV(H,5)-Ref(O,-5);
Y:=C-LLV(L,5);
LSS:=100*(X+Y)/(HHV(H,5)-LLV(L,5))*2;
Diff:=LSS-Ref(LSS,-3);
Diff;
```

LLS Strength Index (1 day)

```
100*(Ref(C,-1)-Ref(L,-1))/(Ref(H,-1)-Ref(L,-1))
```

LLS Pivot Breakout Buy Number

```
X:=(H+L+C)/3;
BBN:=2*X-L;
BSN:=2*X-H;
BBN;
BSN;
```

MACD Additions

MACD Ad

```
mp1:=Input("Short MA",1,377,13);
mp2:=Input("Long MA",1,377,34);
Mov(C ,mp1 ,E )- Mov(C ,mp2 ,E )
```

MACD Ad Signal Line I

```
mp1:=Input("Short MA",1,377,13);
mp2:=Input("Long MA",1,377,34);
mp3:=Input("Signal MA",1,377,89);
Mov( (Mov(C ,mp1 ,E )- Mov(C ,mp2 ,E )),mp3,E)
```

MACD Ad Signal Line II

```
mp1:=Input("Short MA",1,377,13);
mp2:=Input("Long MA",1,377,34);
mp3:=Input("Signal MA",1,377,89);
(Mov(C,mp1,E)-Mov(C,mp2,E))-(Mov((Mov(C,mp1,E)-Mov(C,mp2,E)),mp3,E))
```

MACDcustom

```
MAprd:=Input( "Periods", 5 {Minimum}, 30 {Maximum}, 14 {Default} );
YourTrig:=Mov( MACD(), MAprd, E );
MACD();
YourTrig;
0
```

MACD - DEMA Smoothed

```
shortperiods:=Input("Enter the shorter DEMAperiods:  ",3,20,12);
longperiods:=Input("Enter the longer DEMAperiods:  ",21,50,26);
signal:=Input("Enter the number of signalline periods:  ",3,50,9);
Dema(C,shortperiods)-Dema(C,longperiods);
Mov(Dema(C,shortperiods)-Dema(C,longperiods),signal,E)
```

MACD Future / Dr. Trieber

```
(C-(( 11.607*(Mov(C,26,E)))-(10.607*(Mov(C,12,E)))-(12.536*(Mov(MACD(),9,E) ))))
```

MACD Histogram

```
( Mov( C,12,E ) - Mov( C,26,E ) ) - Mov( (Mov( C,12,E ) - Mov( C,26,E ) ),9,E )
```

MACD Histogram Weekly

```
Mov(If(DayOfWeek()=5,C,Peak(1,If(DayOfWeek()=5,C,0),1)),60,E)-
Mov(If(DayOfWeek()=5,C,Peak(1,If(DayOfWeek()=5,C,0),1)),130,E)-
Mov(Mov(If(DayOfWeek()=5,C,Peak(1,If(DayOfWeek()=5,C,0),1)),60,E)-
Mov(If(DayOfWeek()=5,C,Peak(1,If(DayOfWeek()=5,C,0),1)),130,E),45,E)
```

General Purpose MACDIndicator - Intermediate Term

```
Mov(C,13,E) - Mov(C,34,E) - Mov(( Mov(C,13,E) - Mov(C,34,E)),89,E)
```

General Purpose MACD Indicator - ShortTerm

```
Mov(C,8,E) - Mov(C,17,E) - Mov((Mov(C,8,E) - Mov(C,17,E)),9,E)
```

MACD Modified - Time Series Forecast

```
ShortMA:= Input("Wartość krótkiej średniej -",2,20,12);
LongMA:= Input("Wartość długiej średniej -",20,70,26);
SignalMA:=Input("Wartość średniej signalnej - ",3,50,9);
TSF(C,ShortMA)-TSF(C,LongMA);
Mov(TSF(C,ShortMA)-TSF(C,LongMA),SignalMA,E);
0
```

MACD - Tops and Bottoms + Histogram

```
RocPeriods := 1;
MovAvePeriod :=1;
Mov(3 * ROC(MACD(),RocPeriods,$) , MovAvePeriod,E);
{the 3 just 'magnifies' the line on the plot but doesn't affect the calculation}
Mov(3 * ROC(MACD() - Mov(MACD(),9,E),RocPeriods,$) , MovAvePeriod,E)
```

MACD Histogram - CCT

```
(Mov(C,13,E) - Mov(C,21,E))-(Mov((Mov(C,13,E) - Mov(C,21,E)),5,E))
```

MACDN (P.992)

```
Dmacd:= Input("Największa wartość MACD z dni -",1,50,4);
MACD() / (HHV( Abs(MACD()), Dmacd) ) *100
```

MACDN (P.992) Diff

```
(MACD() / (HHV( Abs(MACD()), 4) ) -
(Mov( (MACD() / (HHV( Abs(MACD()),4) ) ),9,E)))
```

MACD of Relative Strength

```
Q:=Input("Relative Strength Time Periods",3,100,14);
z:=Wilders(If(ROC(C,1,$)>0,ROC(C,1,$),0),LastValue(Q));
y:=Wilders(If(ROC(C,1,$)<0,Abs(ROC(C,1,$)),0),LastValue(Q));
ZY:=Z/Y;
RS:=100-(100/(1+ZY));
RSMACD:=Mov(RS,12,E)-Mov(RS,25,E);
Signal:=Mov(RSMACD,9,E);
RSMACD;
Signal
```

MACD of ROC

```
period1:=12;
period2:=26;
period3:=9;
Mov(ROC(C,12,%),period1,E) - Mov(ROC(C,12,%),period2,E);
Mov((Mov(ROC(C,12,%),period1,E) - Mov(ROC(C,12,%),period2,E)),period3,E);
```

MACD TEMA Smoothed

```
shortperiods:=Input("Enter the shorter TEMAperiods:  ",3,20,12);
longperiods:=Input("Enter the longer TEMAperiods:  ",21,50,26);
signal:=Input("Enter the number of signalline periods:  ",3,50,9);
Tema(C,shortperiods)-Tema(C,longperiods);
Mov(Tema(C,shortperiods) - Tema(C,longperiods),signal,E)
```

MACD w / SAR

```
if(macd(),>,mov(macd(),9,E),{macd is above trigger}
if(sar(.02,.2), <,C,{buy long}+2,{stop shorts}+1),{macd < trigger}
if(sar(.02,.2),>, C,{sell short}-2, {stop longs}-1))
```

Maddox Momentum

```
Sum(((C-Ref(C,-1))*V),10)/100
```

Market Direction Indicator (70/20)

```
(100*((Ref(((
(20*(Sum(C,69))) -
(70*(Sum(C,19)))) / (70-20)),-1) - (
(20*(Sum(C,69))) - (70*(Sum(C,19)))) /
(70-20)))) / Mov(C,2,S)
```

Market Facilitation Index by Gary Hoover

Market Efficiency

```
If(((High-Low) / Volume), >,Ref(((High-Low) / Volume),-1),1,
If(((High-Low) / Volume), <,Ref(((High-Low) / Volume),-1),-1,
If(((High-Low) / Volume), =,Ref(((High-Low) / Volume),-1),0,0)))
```

Market Facilitation Comparison

```
If(V,>,Ref(V,-1),If(((High-Low) / Volume),>,Ref(((High-Low) / Volume),-1),1,
If(((High-Low) / Volume),<,Ref(((High-Low) / Volume),-1),2,0)),If(V,<,Ref(V,-1),
If(((High-Low)/ Volume),>,Ref(((High-Low) / Volume),-1),3,
If(((High-Low) / Volume),<,Ref(((High-Low)/ Volume),-1),4,0)),0))
```

Market Pressure - Ultimate

```
Sum(If(
C > Ref(C,-1) AND V > Ref(V,-1), V *C, If(C < Ref(C,-1) AND
V < Ref(V,-1), Neg(V) * C,0)),7) * 4 + Sum(If(C > Ref(C,-1) AND
V > Ref(V,-1), V* C, If(C < Ref(C,-1) AND
V < Ref(V,-1), Neg(V) * C,0)),14) * 2 + Sum(If(C > Ref(C,-1) AND
V > Ref(V,-1), V* C, If(C < Ref(C,-1) AND V < Ref(V,-1), Neg(V) * C,0)),28)
```

Market Thrust Oscillator - NYSE

```
100 *
( (( Security("X.NYSE-A",C) * Security("X.NYSE-A",V) )  -
   ( Security("X.NYSE-D",C) * Security("X.NYSE-D",V)) ) /
( (( Security("X.NYSE-A",C) * Security("X.NYSE-A",V) )  +
   ( Security("X.NYSE-D",C) * Security("X.NYSE-D",V)) )) )
```

Cumulative Thrust Oscillator Line - NYSE

```
Cum(100 *
( (( Security("X.NYSE-A",C) * Security("X.NYSE-A",V) )  -
   ( Security("X.NYSE-D",C) * Security("X.NYSE-D",V) )) /
( (( Security("X.NYSE-A",C) * Security("X.NYSE-A",V) )  +
   ( Security("X.NYSE-D",C) * Security("X.NYSE-D",V) )) ))  )
```

Cumulative Market Thrust Line - NYSE

```
Cum(
( Security("X.NYSE-A",C) * Security("X.NYSE-A",V) ) -
( Security("X.NYSE-D",C) * Security("X.NYSE-D",V) ) )
```

MARZAK

```
c-ref(c,-1)
```

Mass Index

```
Sum(Mov( ( H - L ) ,9 ,E) / Mov(Mov( ( H -L ) ,9 ,E) ,9 ,E ) ,25 )
```

Matter of Ticks

```
x:=
Minute()=0 OR Minute()=3 OR Minute()=6 OR Minute()=9 OR
Minute()=12 OR Minute()=15 OR Minute()=18 OR Minute()=21 OR
Minute()=24 OR Minute()=27 OR Minute()=30 OR Minute()=33 OR
Minute()=36 OR Minute()=39 OR Minute()=42 OR Minute()=45 OR
Minute()=48 OR Minute()=51 OR Minute()=54 OR Minute()=57;

y:=x AND Ref(x,-1)=0;
Ref(BarsSince(y),-1)+1
```

McClellan Oscillator - NYSE

```
Mov(((Security("X.NYSE-A",O) - Security("X.NYSE-D",O)) ),19,E) -
Mov(((Security("X.NYSE-A",O) - Security("X.NYSE-D",O)) ),39,E)
```

McClellan Summation Index - NYSE

```
Cum(
Mov(((Security("X.NYSE-A",O) - Security("X.NYSE-D",O)) ),19,E) -
Mov(((Security("X.NYSE-A",O) - Security("X.NYSE-D",O)) ),39,E) )
```

McGinley Dynamic

```
Ref(Mov(C,12,E),-1)+((C-(Ref(Mov(C,12,E),-1)))/ (C/(Ref(Mov(C,12,E),-1))*125))
```

Median Price

```
(hhv(H,10)-C)-(C-llv(L,10))/(hhv(H,10)-llv(L,10))
```

Miesal Indicator

```
Sum(If(C > Ref(C,-1), +1, If(C < Ref(C,-1),-1, 0)),10)
```

Modified Moving Average for a two-period average

```
N:=2;
TN:=Mov(C,N,S);
s1:=((n-1)/2)*C+((n-3)/2)*Ref(C,-1);
y2:=TN+(6*S1)/((n+1)*n);
y2
```

Modified Moving Average for a three-period average

```
N:=3;
TN:=Mov(C,N,S);
s1:=((n-1)/2)*C+((n-3)/2)*Ref(C,-1)+((n-5)/2)*Ref(C,-2);
y2:=TN+(6*S1)/((n+1)*n);
y2
```

Modified Moving Average for a four-period average

```
N:=4;
TN:=Mov(C,N,S);
s1:=((n-1)/2)*C+((n-3)/2)*Ref(C,-1)+((n-5)/2)*Ref(C,-2)+((n-7)/2)*Ref(C,-3);
y2:=TN+(6*S1)/((n+1)*n);
y2
```

Modified Moving Average for a 10-period average

```
N:=10;
TN:=Mov(C,N,S);
s1:=((n-1)/2)*C+((n-3)/2)*Ref(C,-1)+((n-5)/2)*Ref(C,-2)+((n-7)/2)*Ref(C,-3)
+((n-9)/2)*Ref(C,-4)+((n-11)/2)*Ref(C,-5)+((n-13)/2)*Ref(C,-6)
+((n-15)/2)*Ref(C,-7)+((n-17)/2)*Ref(C,-8)+((n-19)/2)*Ref(C,-9);
y2:=TN+(6*S1)/((n+1)*n);
y2
```

Modified VIX

```
( ( ( P - Mov( P ,15 ,E ) ) / Mov( P ,15 ,E )) * ( 100 * 33 * 2 ) ) * ( Sqrt( 252 ) / Sqrt( 15 ) / C )
```

Momentum Index

```
PD:= Input("Lookback Period", 5, 220, 30);
MI:= {Chande Momentum Osc (C,PD)}
((Sum(If(CLOSE,>,Ref(CLOSE,-1), (CLOSE-Ref(CLOSE,-1)),0),pd)) -
 (Sum(If(CLOSE,<,Ref(CLOSE,-1), (Ref(CLOSE,-1)- CLOSE),0),pd))) /
((Sum(If(CLOSE,>,Ref(CLOSE,-1), (CLOSE-Ref(CLOSE,-1)),0),pd) +
 (Sum(If(CLOSE,<,Ref(CLOSE,-1), (Ref(CLOSE,-1)- CLOSE),0),pd))))*100;
MI;
```

Momentum Trend Change Indicator

```
((PDI(8) - MDI(8)) - (PDI(21) - MDI(21))) + (PDI(13) - MDI(13))
```

Momentum Trend Indicator

```
If(Mov(C-Ref(C,-5),10,E)>(Mov((Ref(C,-1)-Ref(C,6)),10,E)),1,-1)
```

Money Flow Index 3 in 1

```
Periods:=Input( "Periods", 2, 222, 14);
100 -
 (100 /
  (1 +
   ( (Sum(If(Typ(),>,Ref(Typ(),-1),V * Typ(),0),Periods)) /
     (Sum(If(Typ(),<,Ref(Typ(),-1),V * Typ()*-1,0),Periods)) ) ) )
```

Money Flow - One Day

```
(((Close-Low) - (High-Close)) / (High-Low)) * Volume
```

Morris Double Momentum Oscillator

```
Ref(Mov(C,12,E),-1)+((C-(Ref(Mov(C,12,E),-1)))/ (C/(Ref(Mov(C,12,E),-1))*125))
```

Morris RSI w / Volume

```
100-
 (100/(1+(mov(if(roc(C,1,$),>,0, roc(C,1,$)*V,0),14,S) /
        mov(if(roc(C,1,$),<,0,-roc(C,1,$)*V,0),14,S))))
```

Moving Average - 10 Day/Zero Lag

```
N:=10;
TN:=Mov(CLOSE,N,S);
s1:=((n-1)/2) *
C+((n-3)/2) *
Ref(C,-1)+((n-5)/2) *
Ref(C,-2)+((n-7)/2) *
Ref(C,-3)+((n-9)/2) *
Ref(C,-4)+((n-11)/2) *
Ref(C,-5)+((n-13)/2) *
Ref(C,-6)+((n-15)/2) *
Ref(C,-7)+((n-17)/2) *
Ref(C,-8)+((n-19)/2) *
Ref(C,-9);
y2:=TN+(6*S1)/((n+1)*n);
y2
```

Moving Average Group's by Daryl Guppy

MMA - Grupa średnich DT

```
Mov(C,30,E);
Mov(C,35,E);
Mov(C,40,E);
Mov(C,45,E);
Mov(C,50,E);
Mov(C,60,E);
```

MMA - Grupa średnich KT

```
Mov(C,3,E);
Mov(C,5,E);
Mov(C,8,E);
Mov(C,10,E);
Mov(C,12,E);
Mov(C,15,E);
```

Moving Average - Normalized by Brian Bell

Simple Moving Average Oscillator

OscP(4,8,S,$)

Simple Moving Average Oscillator norm to Std Dev

OscP(4,8,S,$)/Stdev(C,8)

Simple Moving Average Oscillator norm to Ave True Range

OscP(4,8,S,$)/ATR(8)

Simple Moving Average Oscillator norm to Historical Range

OscP(4,8,S,$)/WillR(200)

Moving Average of Only One Day of a the Week

Mov(If(DayOfWeek( )=5,C,Peak(1,If(DayOfWeek( )=5,C,0),1)),15,S)

Moving Average Oscillator - CCT

Mov((Mov(C,3,E)-Mov(C,13,E)),3,S)

Moving Average - Tillson Twicing [TASC]

```
periods:= Input("Periods?",1,63,5);
a:= Input("HOT?",-10,2,.000075);
e1:= Mov(P,periods,E);
e2:= Mov(e1,periods,E);
e3:= Mov(e2,periods,E);
e4:= Mov(e3,periods,E);
e5:= Mov(e4,periods,E);
e6:= Mov(e5,periods,E);
c1:= -a*a*a;
c2:= 3*a*a+3*a-3*a*a*a;
c3:= -6*a*a-3*a-3*a*a*a;
c4:= 1+3*a+a*a*a+3*a*a;
c1*e6+c2*e5+c3*e4+c4*e3;
```

Moving Average - Variable

```
periods:=Input("periods",1,244,89);
VariableMA511( mp() , periods)
```

Moving Average - Variable Length

If(Stdev(C,10)>1,If(Stdev(C,10)>1.5,Mov(C,8,E), Mov(C,10,S)),Mov(C,15,S))

Moving Linear Regression Line

```
Pe:=Input("Periods",3,1000,10);
Z:=LastValue(LinearReg(C,Pe));
Y:=LastValue(Cum(1))-Cum(1);
U:=Z-(LastValue(LinRegSlope(C,Pe))*Y);
R:=0-(LastValue(Cum(1))-Pe);
U+Ref(C,R)-Ref(C,R);
```

Moving Averages with Res. & Sup. by Dennis Tilley

Resistance and Support

```
LookBack := Input("Look Back Periods",1,1000,10);
Resistance :=ValueWhen(1,Cross(Mov(C, LookBack,S),C),HHV(H, LookBack));
Support :=ValueWhen(1,Cross(C,Mov(C, LookBack,S)),LLV(L, LookBack));
Resistance;
Support;
```

Resistance and Support * F

```
PrCnt:=Input("Percentage",0,100,10);
LookBack:= Input("Look Back Periods",1,1000,10);
Resistance:=ValueWhen(1,Cross(Mov(C,LookBack,S),C),HHV(H,LookBack));
Support:=ValueWhen(1,Cross(C,Mov(C,LookBack,S)),LLV(L,LookBack));
Resistance * ((100-prcnt)/100);
Support * ((prcnt/100)+1);
```

MTF - Fixed Balance Point

```
Dw:=If(DayOfWeek()<=Ref(DayOfWeek(),-1),1,0);
Wt:=If(Dw=1,
{then}(Ref(HighestSince(1,Dw=1,H),-1)+
Ref(LowestSince(1,Dw=1,L),-1) +
Ref(C,-1))/3,
{else}0);
DwP:=ValueWhen(1,Wt>0,Wt);
Dwp
```

Multi-Vote OBV

```
Cum(((  If(H > Ref(H,-1),1, If(H < Ref(H,-1),-1,0)) +
      If(C > Ref(C,-1),1, If(C < Ref(C,-1),-1,0)) +
      If(L > Ref(L,-1),1, If(L < Ref(L,-1),-1,0))) * VOLUME))
```

Natenberg's Volatility Daily

Std(Log(C / Ref(C,-1)),10) * Sqrt(365)

N BARS

cv:= Input("Okres -",5,100,20);
((CLOSE * CLOSE) / ((HHV(H,cv)) * (LLV(L,cv))))

Negative Volume Indicator

Cum(If(V<Ref(V,-1),ROC(C,1,%),0))

Nonlinear Ehlers Filters by John Ehlers

Ehlers Filters

ti:= 15;
pr:= MP();
coef:= Abs(pr - Ref(pr,-5));

Sum(coef*pr,ti)/Sum(coef,ti)

Distant Coefficient Ehlers Filter

ti:= 15;
pr:= MP();
coef:=Sum(Power(Ref(LastValue(pr+PREV-PREV)-pr,-1),2),ti);

Sum(coef*pr,ti)/Sum(coef,ti)

Normalizing Indicators by Brian Bell

Simple Moving Average Oscillator

OscP(4,8,S,$)

Simple MA Osc norm to Std Dev

OscP(4,8,S,$)/Stdev(C,8)

Simple MA Osc norm to Ave True Range

OscP(4,8,S,$)/ATR(8)

Simple MA Osc norm to Historical Range

OscP(4,8,S,$)/WillR(200)

OBV

(if(c > ref(c,-1),1,-1) * volume) + PREV

Offset RSI

RSI(13) - 50 {offset the RSI to +-50}

Offset MACD

(MACD()*10 +50) {offset the MACD to 50}

On Balance True Range I

```
Cum(If(C > Ref(C,-1),1,-1) *
(If(Ref(C,-1) < L,
{Then} (H - Ref(C,-1)),
{Else}
If(Ref(C,-1) > H,
{Then} (Ref(C,-1) - L),
{Else} (H - L)
))))
```

On Balance True Range II

```
Cum(If(C > Ref(C,-1),1,
If(C < Ref(C,-1),-1,0))*
(If(Ref(C,-1) < L,
{Then} (H - Ref(C,-1)),
{Else} If(Ref(C,-1) > H,
{Then} (Ref(C,-1) - L),
{Else} (H - L)
))))
```

On Balance True Range Short-Term

```
Mov(Cum(If(C > Ref(C,-1),1,-1) *
(If(Ref(C,-1) < L,
{Then} (H - Ref(C,-1)),
{Else}
If(Ref(C,-1) > H,
{Then} (Ref(C,-1) - L),
{Else} (H - L) )))), 10 ,E)
```

On Balance True Range Intermediate-Term

```
Mov(Mov(Cum(If(C > Ref(C,-1),1,-1) *
(If(Ref(C,-1) < L,
{Then} (H - Ref(C,-1)),
{Else}
If(Ref(C,-1) > H,
```

```
{Then} (Ref(C,-1) - L),
{Else} (H - L) )))), 10 ,E),10,E)
```

On Balance True Range Long-Term

```
Mov(Mov(Mov(Cum(If(C > Ref(C,-1),1,-1) *
(If(Ref(C,-1) < L,
{Then} (H - Ref(C,-1)),
{Else}
If(Ref(C,-1) > H,
{Then} (Ref(C,-1) - L),
{Else} (H - L) )))), 10 ,E),10,E),10,E)
```

Onno's Binary Wave Indicator

```
long:=If(RSI(14)<30 OR Mo(12)<90,1,
If(RSI(14)>70 OR Mo(12)>110,-1,PREVIOUS));
long;
```

Oscillating OBV

```
DSed:= Input("Długość średniej  -",5,50,20);
( Mov(OBV(),DSed,E)-OBV())*(-1)
```

Overbuy / Oversell

```
Zakres:= Input("Ilość sesji  -",7,1000,21);
((C - LLV(L,Zakres))/(HHV(H,Zakres) - LLV(L,Zakres)))* 100
```

Overlap Indicator

```
(H-L) -
(If(H-Ref(H,-1)>0, (H-Ref(H,-1)),0) +
(If(L-Ref(L,-1)<0, (Ref(L,-1)-L),0)))
```

Overreaction Index

```
if(ref(std(C,3),-3),>,4,+1,0)+if(C,<,(sar(.015,.15)),-1,+1)
```

OWMA d

```
{OWMA denominator N=12 Alph=2}
Pwr(1,2) + Pwr(2,2) + Pwr(3,2) + Pwr(4 ,2) + Pwr(5 ,2) + Pwr(6 ,2) +
Pwr(7,2) + Pwr(8,2) + Pwr(9,2) + Pwr(10,2) + Pwr(11,2) + Pwr(12,2)
```

OWMA P

```
{OWMA Part 1 N=12 Alph=2}
((Pwr(12,2) / Fml("OWMA d")) * C) +
((Pwr(11,2) / Fml("OWMA d")) * Ref(C,-1)) +
```

```
((Pwr(10,2) / Fml("OWMA d")) * Ref(C,-2)) +
((Pwr(9 ,2) / Fml("OWMA d")) * Ref(C,-3)) +
((Pwr(8 ,2) / Fml("OWMA d")) * Ref(C,-4)) +
((Pwr(7, 2) / Fml("OWMA d")) * Ref(C,-5)) +
((Pwr(6, 2) / Fml("OWMA d")) * Ref(C,-6)) +
((Pwr(5, 2) / Fml("OWMA d")) * Ref(C,-7))
```

Parabolic

```
If( (SAR(0.02,0.2)<C AND (ADXR(14)>15)),1,
If((SAR(0.02,0.2)>C AND (ADXR(14)>15)),-1,0));
ADXR(14)-15;
SAR(0.02,0.2)-C
```

Peak Oscillator by Cynthia KASE

```
Per1:=Input("max length",10,100,30);
RWH:=(H-Ref(L,-Per1))/(ATR(Per1)*Sqrt(Per1));
RWL:=(Ref(H,-Per1)-L)/(ATR(Per1)*Sqrt(Per1));
Pk:=Mov((RWH-RWL),3,W);
MN:=Mov(Pk,Per1,S);
SD:=Stdev(Pk,Per1);
Val1:=If(MN+(1.33*SD)>2.08,MN+(1.33*SD),2.08);
Val2:=If(MN-(1.33*SD)<-1.92,MN-(1.33*SD),-1.92);
LN:=If(Ref(Pk,-1)>=0 AND Pk>0,Val1,If(Ref(Pk,-1)<=0 AND Pk<0,Val2,0));
Red:=If(Ref(Pk,-1)>Pk,Pk,0);
Green:=If(Pk>Ref(Pk,-1),Pk,0);
Red;
Green;
LN;
```

Percent Above / Below Moving Average

```
(oscp(1,30,E,%))
```

Persistence of Money Flow (PMF %)

```
Pds1:= Input("CMF Periods?",1,100,21);
Pds2:= Input("PMF Periods?",10,1000,120);
Sum((cmf(Pds1)>0),Pds2)/(Pds2/100)
```

Pivot Price Indictor

```
{P = Pivot Price}
(H + L + C)/3;
{R1 = 1st Resistance}
(2*((H + L + C)/3))-L;
{S1 = 1st Support}
(2*((H + L + C)/3))-H;
{R2 = 2nd Resistance }
(((H + L + C)/3)-((2*((H + L + C)/3))-H))+((2*((H + L + C)/3))-L);
{S2 = 2nd Support}
((H + L + C)/3)-(((2*((H + L + C)/3))-L)-((2*((H + L + C)/3))-H))
```

Plotting Forward Days

```
TC:=Input("Tomorrow's close",0.001,100000,1);
MAP:=Input("Moving Average Period",2,144,55);
MA1:=Mov(C,MAP,E);
EPX:=2/(MAP+1);
MA2:=(TC*EPX)+(MA1*(1-EPX));
ValueWhen(1,Cum(1)=LastValue(Cum(1)),MA2)
```

Point of Balance Oscillator

```
n := Input("Time Periods",1,100,12)/2;
POBC1 := (HHV(CLOSE, n) + LLV(CLOSE,n))/2;
POBC2 := (HHV(POBC1, n) + LLV(POBC1,n))/2;
POBC3 := (HHV(POBC2, n) + LLV(POBC2,n))/2;
POBC4 := (HHV(POBC3, n) + LLV(POBC3,n))/2;
POBC5 := (HHV(POBC4, n) + LLV(POBC4,n))/2;
POBC6 := (HHV(POBC5, n) + LLV(POBC5,n))/2;
POBC7 := (HHV(POBC6, n) + LLV(POBC6,n))/2;
POBC8 := (HHV(POBC7, n) + LLV(POBC7,n))/2;
POBC9 := (HHV(POBC8, n) + LLV(POBC8,n))/2;
POBC10 := (HHV(POBC9, n) + LLV(POBC9,n))/2;
AV := (POBC1 + POBC2 + POBC3 + POBC4 +
POBC5+ POBC6 + POBC7 + POBC8 + POBC9 + POBC10) / 10;
POBCOsc := 100 * ((CLOSE - AV) / (HHV(CLOSE,10)-LLV(CLOSE, 10)));
POBCOsc
```

Polarized Fractal Efficiency

```
Mov(If(C,>,Ref(C,-9),Sqr(Pwr(Roc(C,9,$),2) + Pwr(10,2)) /
Sum(Sqr(Pwr(Roc(C,1,$),2)+1),9),-
Sqr(Pwr(Roc(C,9,$),2) + Pwr(10,2)) /
Sum(Sqr(Pwr(Roc(C,1,$),2)+1),9))*100,5,E)
```

Positive Volume Indicator

```
Cum(If(V>Ref(V,-1),ROC(C,1,%),0))
```

Percentage Price Oscillator I

```
PPO:= ((Mov(C,12,E ) - Mov(C,26,E))/Mov(C,12,E))*100;
Trigger:= Mov(PPO,9,E);
PPO; Trigger;
```

Periods Loaded and First Loaded Closing Price I

```
InitialEquity:= Input("Enter the initial equity",100,10000,3000);
Equity:= InitialEquity*( 1 + Per()/100);
Equity
```

Periods Loaded and First Loaded Closing Price II

```
InitialEquity:= Input("Enter the initial equity",100,10000,3000);
1stClose:= ValueWhen(1, Cum(1) = 1, CLOSE);
Equity:= InitialEquity*CLOSE / 1stClose;
Equity
```

Price Action Indicator (PAIN)

```
((C-O)+(C-H)+(C-L))/2
```

Price Oscillator Wave

```
if(ref(oscp(3,15,S,%),-1),<,0,1,0)
```

Price Volume Rank - Biggie (This combines all formulas intoone formula)

```
If( C ,> ,Ref( C ,-1 ) ,If( V ,> ,Ref( V ,-1) ,1 ,If( V ,< ,Ref( V ,-1 ) ,2 ,0 ) ) ,
If( C ,< ,Ref( C ,-1 ), If( V ,< ,Ref( V ,-1 ) ,3 ,If( V ,> ,Ref( V ,-1) ,4 ,0 ) ) ,0 ))
```

Price Volume Trend Stochastic

```
{Fast line}
;Mov((PVT()-LLV(PVT(),19)) / (HHV(PVT(),19)-LLV(PVT(),19)), 5, S)

{Slow Line}
;Mov(Mov((PVT()-LLV(PVT(),19)) / (HHV(PVT(),19)-LLV(PVT(),19)), 5, S),3,S)
```

Projection Bandwidth by Mel Widner

Slope of High

```
{14 period regression line of High)}
((14 * (Sum( Cum(1) * HIGH, 14))) - (Sum( Cum(1),14) * ( Sum(HIGH, 14)))) /
((14 * Sum( Pwr( Cum(1), 2), 14)) - Pwr( Sum(Cum(1),14), 2))
```

Slope of Low

```
{14 period regression line of Low}
((14 * (Sum( Cum(1) * LOW, 14))) - (Sum( Cum(1), 14) * ( Sum(LOW, 14))))/
((14 * Sum( Pwr( Cum(1), 2), 14)) - Pwr( Sum(Cum(1),14), 2))
```

Upper Projection Band

```
Max(HIGH,
    Max( Ref(HIGH,-1) + 1 * Fml("slope of high"),
    Max( Ref(HIGH,-2) + 2 * Fml("slope of high"),
    Max( Ref(HIGH,-3) + 3 * Fml("slope of high"),
    Max( Ref(HIGH,-4) + 4 * Fml("slope of high"),
    Max( Ref(HIGH,-5) + 5 * Fml("slope of high"),
    Max( Ref(HIGH,-6) + 6 * Fml("slope of high"),
```

```
    Max( Ref(HIGH,-7) + 7 * Fml("slope of high"),
    Max( Ref(HIGH,-8) + 8 * Fml("slope of high"),
    Max( Ref(HIGH,-9) + 9 * Fml("slope of high"),
    Max( Ref(HIGH,-10) + 10 * Fml("slope of high"),
    Max( Ref(HIGH,-11) + 11 * Fml("slope of high"),
    Max( Ref(HIGH,-12) + 12 * Fml("slope of high"),
    Ref(HIGH,-13) + 13 * Fml("slope of high")))))))))))))
```

Lower Projection Band

```
Min(LOW,
    Min( Ref(LOW,-1) + 1 * Fml("slope of low"),
    Min( Ref(LOW,-2) + 2 * Fml("slope of low"),
    Min( Ref(LOW,-3) + 3 * Fml("slope of low"),
    Min( Ref(LOW,-4) + 4 * Fml("slope of low"),
    Min( Ref(LOW,-5) + 5 * Fml("slope of low"),
    Min( Ref(LOW,-6) + 6 * Fml("slope of low"),
    Min( Ref(LOW,-7) + 7 * Fml("slope of low"),
    Min( Ref(LOW,-8) + 8 * Fml("slope of low"),
    Min( Ref(LOW,-9) + 9 * Fml("slope of low"),
    Min( Ref(LOW,-10) + 10 * Fml("slope of low"),
    Min( Ref(LOW,-11) + 11 * Fml("slope of low"),
    Min( Ref(LOW,-12) + 12 * Fml("slope of low"),
    Ref(LOW,-13) + 13 * Fml("slope of low")))))))))))))
```

Projection Bandwidth

```
200 *
(Fml("Upper Projection Band") - Fml("Lower Projection Band")) /
(Fml("Upper Projection Band") + Fml("Lower Projection Band"))
```

Projection Oscillator by Mel Widner

Slope of High

```
{14 period regression line of High)}
((14 * (Sum( Cum(1) * HIGH, 14))) - (Sum( Cum(1),14) * ( Sum(HIGH, 14)))) /
((14 * Sum( Pwr( Cum(1), 2), 14)) - Pwr( Sum(Cum(1),14), 2))
```

Slope of Low

```
{14 period regression line of Low}
((14 * (Sum( Cum(1) * LOW, 14))) - (Sum( Cum(1), 14) * ( Sum(LOW, 14)))) /
((14 * Sum( Pwr( Cum(1), 2), 14)) - Pwr( Sum(Cum(1),14), 2))
```

Upper Projection Band

```
Max(HIGH,
Max( Ref(HIGH,-1) + 1 * Fml("slope of high"),
Max( Ref(HIGH,-2) + 2 * Fml("slope of high"),
Max( Ref(HIGH,-3) + 3 * Fml("slope of high"),
Max( Ref(HIGH,-4) + 4 * Fml("slope of high"),
```

```
Max( Ref(HIGH,-5) + 5 * Fml("slope of high"),
Max( Ref(HIGH,-6) + 6 * Fml("slope of high"),
Max( Ref(HIGH,-7) + 7 * Fml("slope of high"),
Max( Ref(HIGH,-8) + 8 * Fml("slope of high"),
Max( Ref(HIGH,-9) + 9 * Fml("slope of high"),
Max( Ref(HIGH,-10) + 10 * Fml("slope of high"),
Max( Ref(HIGH,-11) + 11 * Fml("slope of high"),
Max( Ref(HIGH,-12) + 12 * Fml("slope of high"),
Ref(HIGH,-13) + 13 * Fml("slope of high")))))))))))))
```

Lower Projection Band

```
Min(LOW,
Min( Ref(LOW,-1) + 1 * Fml("slope of low"),
Min( Ref(LOW,-2) + 2 * Fml("slope of low"),
Min( Ref(LOW,-3) + 3 * Fml("slope of low"),
Min( Ref(LOW,-4) + 4 * Fml("slope of low"),
Min( Ref(LOW,-5) + 5 * Fml("slope of low"),
Min( Ref(LOW,-6) + 6 * Fml("slope of low"),
Min( Ref(LOW,-7) + 7 * Fml("slope of low"),
Min( Ref(LOW,-8) + 8 * Fml("slope of low"),
Min( Ref(LOW,-9) + 9 * Fml("slope of low"),
Min( Ref(LOW,-10) + 10 * Fml("slope of low"),
Min( Ref(LOW,-11) + 11 * Fml("slope of low"),
Min( Ref(LOW,-12) + 12 * Fml("slope of low"),
Ref(LOW,-13) + 13 * Fml("slope of low")))))))))))))
```

Projection Oscillator

```
100 * (CLOSE -
  Fml( "Lower Projection Band" )) /
( Fml( "Upper Projection Band" ) -
  Fml( "Lower Projection Band" ))
```

Psychological Index

```
{Futures Magazine, Vol.29 No.6, June 2000, P.48}
LookBack:= Input("Number of lookback periods", 2, 100, 12);
UThreshold:= Input("Upper threshold (%)", 0, 100, 75);
LThreshold:= Input("Lower threshold (%)", 0, 100, 25);
UpDay:= If(CLOSE > Ref(CLOSE,-1), 1, 0);
PsychIndex:= Sum(UpDay,LookBack) / LookBack * 100;
PsychIndex;
UThreshold;
Lthreshold
```

r-squared

```
Pwr(Corr(Cum(1),C,14,0),2)
```

Rainbow Max

```
Max(Mov(C,2,S),
Max(Mov(Mov(C,2,S),2,S),
Max(Mov(Mov(Mov(C,2,S),2,S),2,S),
Max(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),
Max(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),
Max(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S)
,2,S),2,S),
Max(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S)
,2,S),2,S),2,S),2,S),
Max(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S)
,2,S),2,S),2,S),2,S),2,S),2,S),
Max(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S)
,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S),
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S)
,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S)))))))))
```

Rainbow Min

```
Min(Mov(C,2,S),
Min(Mov(Mov(C,2,S),2,S),
Min(Mov(Mov(Mov(C,2,S),2,S),2,S),
Min(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),
Min(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),
Min(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S)
,2,S),2,S),
Min(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S)
,2,S),2,S),2,S),2,S),
Min(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S)
,2,S),2,S),2,S),2,S),2,S),2,S),
Min(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S)
,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S),
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S)
,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S)))))))))
```

Rainbow Oscillator

```
100 *
(CLOSE - ((
Mov(C,2,S)+
Mov(Mov(C,2,S),2,S)+
Mov(Mov(Mov(C,2,S),2,S),2,S) +
Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S)+
Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S)+
Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S)
,2,S)+
Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S)
,2,S),2,S),2,S)+
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S)
,2,S),2,S),2,S),2,S),2,S)+
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S)
,2,S),2,S),2,S),2,S),2,S),2,S),2,S)+
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S)
```

```
,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S))
/10))/(HHV(C,10)-LLV(C,10))
```

Rainbow Band Lower

```
-100 * (Fml("Rainbow Max") - Fml("Rainbow Min")) /
(HHV(C,10) - LLV(C,10))
```

Rainbow Band Upper

```
100 * (Fml("Rainbow Max") - Fml("Rainbow Min")) /
(HHV(C,10) - LLV(C,10))
```

Random Walk Index

```
Max((Ref(HIGH,-1) - LOW) / ((Ref(Sum(ATR(1),2),-1) / 2) * Sqrt(2)),
Max((Ref(HIGH,-2) - LOW) / ((Ref(Sum(ATR(1),3),-1) / 3) * Sqrt(3)),
Max((Ref(HIGH,-3) - LOW) / ((Ref(Sum(ATR(1),4),-1) / 4) * Sqrt(4)),
Max((Ref(HIGH,-4) - LOW) / ((Ref(Sum(ATR(1),5),-1) / 5) * Sqrt(5)),
Max((Ref(HIGH,-5) - LOW) / ((Ref(Sum(ATR(1),6),-1) / 6) * Sqrt(6)),
Max((Ref(HIGH,-6) - LOW) / ((Ref(Sum(ATR(1),7),-1) / 7) * Sqrt(7)),
Max((Ref(HIGH,-7) - LOW) / ((Ref(Sum(ATR(1),8),-1) / 8) * Sqrt(8)),
   (Ref(HIGH,-8) - LOW) / ((Ref(Sum(ATR(1),9),-1) / 9) * Sqrt(9)) )) )) )) )
```

Random Walk Index [6.0] High

```
{This is the ST 9-day version of the RWI.
Color High: Red,Solid and the Low: Red,Dotted.
Horizontal line at 1.0(Black/Blue)}
{Standard Horizontal Line = 1.0, Black/Blue}
Max( (HIGH -Ref(LOW,-1)) / ( (Ref(Sum(ATR(1),2),-1) / 2)*Sqrt(2) ),
Max( (HIGH -Ref(LOW,-2)) / ( (Ref(Sum(ATR(1),3),-1) / 3)*Sqrt(3) ),
Max( (HIGH -Ref(LOW,-3)) / ( (Ref(Sum(ATR(1),4),-1) / 4)*Sqrt(4) ),
Max( (HIGH -Ref(LOW,-4)) / ( (Ref(Sum(ATR(1),5),-1) / 5)*Sqrt(5) ),
Max( (HIGH -Ref(LOW,-5)) / ( (Ref(Sum(ATR(1),6),-1) / 6)*Sqrt(6) ),
Max( (HIGH -Ref(LOW,-6)) / ( (Ref(Sum(ATR(1),7),-1) / 7)*Sqrt(7) ),
Max( (HIGH -Ref(LOW,-7)) / ( (Ref(Sum(ATR(1),8),-1) / 8)*Sqrt(8) ),
Max( (HIGH -Ref(LOW,-8)) / ( (Ref(Sum(ATR(1),9),-1) / 9)*Sqrt(9)),0)))))))
```

Random Walk Index [6.0] Low

```
{This is the ST 9-day version of the RWI.
For High: Red,Solid and the Low: Red,Dotted.
Horizontal line at 1.0(Black/Blue)}
Max( (Ref(HIGH,-1) -LOW) / ( (Ref(Sum(ATR(1),2),-1) / 2)*Sqrt(2) ),
Max( (Ref(HIGH,-2) -LOW) / ( (Ref(Sum(ATR(1),3),-1) / 3)*Sqrt(3) ),
Max( (Ref(HIGH,-3) -LOW) / ( (Ref(Sum(ATR(1),4),-1) / 4)*Sqrt(4) ),
Max( (Ref(HIGH,-4) -LOW) / ( (Ref(Sum(ATR(1),5),-1) / 5)*Sqrt(5) ),
Max( (Ref(HIGH,-5) -LOW) / ( (Ref(Sum(ATR(1),6),-1) / 6)*Sqrt(6) ),
Max( (Ref(HIGH,-6) -LOW) / ( (Ref(Sum(ATR(1),7),-1) / 7)*Sqrt(7) ),
```

```
Max( (Ref(HIGH,-7) -LOW) / ( (Ref(Sum(ATR(1),8),-1) / 8)*Sqrt(8) ),
Max( (Ref(HIGH,-8) -LOW) / ( (Ref(Sum(ATR(1),9),-1) / 9)*Sqrt(9)),0)))))))
```

Random Walk Index [6.0] LT High

```
{This is the LT 50-day version of the RWI.
Color High: Red,Solid and the Low: Red,Dotted.
Horizontal line at 1.0(Black/Blue)}
SUM(
Max( (HIGH -Ref(LOW,-1)) / ( (Ref(Sum(ATR(1),2),-1) / 2)*Sqrt(2) ),
Max( (HIGH -Ref(LOW,-2)) / ( (Ref(Sum(ATR(1),3),-1) / 3)*Sqrt(3) ),
Max( (HIGH -Ref(LOW,-3)) / ( (Ref(Sum(ATR(1),4),-1) / 4)*Sqrt(4) ),
Max( (HIGH -Ref(LOW,-4)) / ( (Ref(Sum(ATR(1),5),-1) / 5)*Sqrt(5) ),
Max( (HIGH -Ref(LOW,-5)) / ( (Ref(Sum(ATR(1),6),-1) / 6)*Sqrt(6) ),
Max( (HIGH -Ref(LOW,-6)) / ( (Ref(Sum(ATR(1),7),-1) / 7)*Sqrt(7) ),
Max( (HIGH -Ref(LOW,-7)) / ( (Ref(Sum(ATR(1),8),-1) / 8)*Sqrt(8) ),
Max( (HIGH -Ref(LOW,-8)) / ( (Ref(Sum(ATR(1),9),-1) / 9)*Sqrt(9)),
0))))))),40)
```

Random Walk Index [6.0] LT Low

```
{This is the LT 50-day version of the RWI.
For High: Red,Solid and the Low: Red,Dotted.
Horizontal line at 1.0(Black/Blue)}
SUM(
Max( (Ref(HIGH,-1) -LOW) / ( (Ref(Sum(ATR(1),2),-1) / 2)*Sqrt(2) ),
Max( (Ref(HIGH,-2) -LOW) / ( (Ref(Sum(ATR(1),3),-1) / 3)*Sqrt(3) ),
Max( (Ref(HIGH,-3) -LOW) / ( (Ref(Sum(ATR(1),4),-1) / 4)*Sqrt(4) ),
Max( (Ref(HIGH,-4) -LOW) / ( (Ref(Sum(ATR(1),5),-1) / 5)*Sqrt(5) ),
Max( (Ref(HIGH,-5) -LOW) / ( (Ref(Sum(ATR(1),6),-1) / 6)*Sqrt(6) ),
Max( (Ref(HIGH,-6) -LOW) / ( (Ref(Sum(ATR(1),7),-1) / 7)*Sqrt(7) ),
Max( (Ref(HIGH,-7) -LOW) / ( (Ref(Sum(ATR(1),8),-1) / 8)*Sqrt(8) ),
Max( (Ref(HIGH,-8) -LOW) / ( (Ref(Sum(ATR(1),9),-1) / 9)*Sqrt(9)),
0))))))),40)
```

Rate of Change Since a Specific Date

```
Day1 := Input("Day",1,31,4);
Month1 := Input("Month",1,12,1);
Year1 := Input("Year",1900,2400,1999);

100 * (CLOSE - ValueWhen(1,DayOfMonth() = Day1 AND Month() = Month1
AND Year() = Year1, CLOSE))/ ValueWhen(1,DayOfMonth() = Day1
AND Month() = Month1 AND Year() = Year1,CLOSE)
```

Recursive Moving Trend Average

```
Lb:=Input("Look-Back Period?",3,100,21);
Alpha:=2/(LB+1);
Bot:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+C;
RMTA:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+ (Alpha*Abs(C+Bot-Ref(Bot,-1)));
RMTA;
```

TOSC Oscillator

```
Lb:=Input("Look-Back Period?",3,100,21);
Alpha:=2/(LB+1);
Bot:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+C;
RMTA:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+  (Alpha*Abs(C+Bot-Ref(Bot,-1)));
TOSC:=RMTA-Mov(C,lb,E);
TOSC;
```

Regression Oscillator

```
100 * (CLOSE/ LinearReg(CLOSE,63)-1)
```

Slope/Close Indicator

```
10000* LinRegSlope(CLOSE,63)/CLOSE
```

Relative Momentum Index

```
Q:=Input("RSI Time Periods",1,1000,14);
M:=Input("Momentum Time Periods",1,1000,5);
B:=Input("Field: 1=Close, 2=Open, 3=High, 4=Low, 5=Volume",1,5,1);
Bval:=If(B=1,C,If(B=2,O,If(B=3,H,If(B=4,L,V))));
Mom:=Bval-Ref(Bval,-M);

Z:=Wilders(If(ROC(Mom,1,$)>0, ROC(Mom,1,$),0),LastValue(Q));

Y:=Wilders(If(ROC(Mom,1,$)<0, Abs(ROC(Mom,1,$)),0),LastValue(Q));

RMS:=Z/Y;
RMIcust:=100-(100/(1+RMS));
Mov(RMIcust,M,S)
```

Relative Strength Index (RSI) Custom I

```
Q:=Input("Time Periods",1,1000,14);

B:=Input("Field: 1=Close, 2=Open, 3=High, 4=Low,5=Volume",1,5,1);

Z:=If(B=1,Wilders(If(ROC(C,1,$)>0,ROC(C,1,$),0),LastValue(Q)),
If(B=2,Wilders(If(ROC(O,1,$)>0,ROC(O,1,$),0),LastValue(Q)),
If(B=3,Wilders(If(ROC(H,1,$)>0,ROC(H,1,$),0),LastValue(Q)),
If(B=4,Wilders(If(ROC(L,1,$)>0,ROC(L,1,$),0),LastValue(Q)),

Wilders(If(ROC(V,1,$)>0,ROC(V,1,$),0),LastValue(Q))))));

Y:=If(B=1,Wilders(If(ROC(C,1,$)<0,Abs(ROC(C,1,$)),0),LastValue(Q)),
```

```
If(B=2,Wilders(If(ROC(O,1,$)<0,Abs(ROC(O,1,$)),0),LastValue(Q)),
If(B=3,Wilders(If(ROC(H,1,$)<0,Abs(ROC(H,1,$)),0),LastValue(Q)),
If(B=4,Wilders(If(ROC(L,1,$)<0,Abs(ROC(L,1,$)),0),LastValue(Q)),
Wilders(If(ROC(V,1,$)<0,Abs(ROC(V,1,$)),0),LastValue(Q))))));

RS:=Z/Y;

100-(100/(1+RS))
```

Relative Strenght Index - Custom II

```
okres:=Input("Okres w RSI",1,100,14);
rsc:=If(Mov(If(C-Ref(C,-1)<0,abs(C-Ref(C,-1)),0),okres,E)=0,1000000,
Mov(If(C-Ref(C,-1)>0, C-Ref(C,-1), 0),okres,E) /
Mov(If(C-Ref(C,-1)<0,abs(C-Ref(C,-1)),0),okres,E));
rsic:=(100-(100/(1+rsc)));
rsic
```

Relative Strength Index - Custom III

```
RSIPeriod:= Int(14 / (Stdev(CLOSE,10)/Stdev(CLOSE,5)));
RSIDataArray:= Mov(CLOSE,25,SIMPLE);

U:= Wilders(If(ROC(RSIDataArray,1,$)>0,
    ROC(RSIDataArray,1,$), 0),
    LastValue(RSIPeriod));

D:= Wilders(If(ROC(RSIDataArray,1,$)<0,
    Abs(ROC(RSIDataArray,1,$)), 0),
    LastValue(RSIPeriod));

100-(100/(1+U/D))
```

Relative Strength Index (RSI) Denvelope

```
pds:=Input("Periods",2,200,14);
sd:=Input("Standard Deviations",.01,10,2);
D1:= RSI(pds);
alpha:=2/(pds+1);
mt:=alpha*D1+(1-alpha)*(If(Cum(1)<pds,D1,PREV));
ut:=alpha*mt+(1-alpha)*(If(Cum(1)<pds,D1,PREV));
dt:=((2-alpha)*mt-ut)/(1-alpha);
mt2:=alpha*Abs(D1-dt)+(1-alpha)*PREV;
ut2:=alpha*mt2+(1-alpha)*PREV;
dt2:=((2-alpha)*mt2-ut2)/(1-alpha);
but:=dt+sd*dt2;
blt:=dt-sd*dt2;
blt;
dt;
```

but;

Relative Strength Index - Full Formula

```
100 - 100/ (1.+ If(Mov(If(P-Ref(P,-1)<0,-(P-Ref(P,-1)),0),23,E)=0,1000000,
Mov(If(P-Ref(P,-1)>0, P-Ref(P,-1), 0),23,E)/ Mov(If(P-Ref(P,-1)<0,-(P-Ref(P,-1)),0),23,E) ))
```

Relative Vigor Index (RVI) by John Ehlers

```
ti:=Input("length",2,20,10);
v1:=((C-O)+(2*Ref(C-O,-1))+(2*Ref(C-O,-2))+Ref(C-O,-3))/6;
v2:=((H-L)+(2*Ref(H-L,-1))+(2*Ref(H-L,-2))+Ref(H-L,-3))/6;
temp:=If(Sum(v2,ti)=0,0.0001,Sum(v2,ti));
rv:=Sum(v1,ti)/temp;
rvsig:= (rv+Ref(2*rv,-1)+Ref(2*rv,-2)+Ref(rv,-3))/6;
rv;
rvsig
```

Relative Volatility Index (RVI)

```
(100*
 (((PREV*13) + If(ROC(C,1,%)>0,Stdev(C,10),0))/14)) /
((((PREV*13) + If(ROC(C,1,%)>0,Stdev(C,10),0))/14) +
 (((PREV*13) + If(ROC(C,1,%)<0,Stdev(C,10),0))/14))
```

Relative Volatility Index II

```
100 * Mov( If(CLOSE > Ref(CLOSE,-1), Std(CLOSE,10), 0),14,E) /
(Mov( If(CLOSE > Ref(CLOSE,-1), Std(CLOSE,10), 0),14,E) +
Mov(If(CLOSE < Ref(CLOSE,-1), Std(CLOSE,10), 0),14,E))
```

RSI Divergence Buy & Sell

```
If(RSI(9) >= HHV(RSI(9),19) AND CLOSE <HHV(CLOSE,19),1,0) OR
If(CLOSE <= LLV(CLOSE,19) AND RSI(9) >LLV(RSI(9),19), 1,0);

If(CLOSE >= HHV(CLOSE,19) AND RSI(9)<HHV(RSI(9),19),1,0) OR
If(RSI(9) <= LLV(RSI(9),19) AND CLOSE >LLV(CLOSE,19),1,0);
```

RSI moood p502

```
(100 - 100 / (1 + (Mov( If(ROC(V,1,$), >,0,ROC(V,1,$) ,0), 13, S) /
Mov( If(ROC(V,1,$), <,0,-ROC(V,1,$),0), 13, S))) ) +
(100 - 100 / (1 + (Mov( If(ROC(C,1,$), >,0,ROC(C,1,$) ,0), 13, S) /
Mov( If(ROC(C,1,$), <,0,-ROC(C,1,$),0), 13, S))) )
```

RsiSto Oscillator

```
(100 *
( Mov(
  (C - LLV(C, 28)) / (HHV(C, 28)) -
   LLV(C, 28), 13, E))) +
    RSI(14) -
      100
```

RSI_m_SK

```
RSIPer := Input("Okres RSI ",2,100,14);
100-100/(1+(Mov(If(ROC(C,1,$),>,0,ROC(C,1,$),0),RSIPer,S)/ Mov(If(ROC(C,1,$),<,0,-
ROC(C,1,$),0),RSIPer,S)))
```

RSI_m_SK_Va

```
RSIPer := Input("okres RSI ",2,100,14);
100-100/(1+(Mov(If(ROC(C,1,$),>,0,ROC(C,1,$)*V,0),RSIPer,S)/ Mov(If(ROC(C,1,$),<,0,-
ROC(C,1,$)*V,0),RSIPer,S)))
```

RSI of MACD

```
Q:=Input("Periods",1,1000,14);
Z:=Wilders(If(ROC(MACD(),1,$)>0,ROC(MACD(),1,$),0),LastValue(Q));
Y:=Wilders(If(ROC(MACD(),1,$)<0,Abs(ROC(MACD(),1,$)),0),LastValue(Q));
RS:=Z/Y;
100-(100/(1+RS))
```

RSI Starting In the Middle of Chart

```
StartInd:= Month()=5 AND DayOfMonth()=15 AND Year()=2000;
StartPt:=ValueWhen(1,StartInd<>0,1);
If(StartPt=1,RSI(9),0)
```

Ruggerio's Trend

```
periods:=Input("Periods?",1,63,14);
If((ADX(periods) > 25 AND
(BarsSince(Cross(45,ADX(periods))) > BarsSince(Cross(ADX(periods),25)))) OR
(ADX(periods) > 10 AND
Ref(ADX(periods),-4) < 10 AND (ADX(periods) - Ref(ADX(periods),-5) > 0)),1,
If(ADX(periods) < 20 OR
((BarsSince(Cross(45,ADX(periods))) < BarsSince(Cross(ADX(periods),25))) AND
ADX(periods) < 45),-1,0))
```

Rule of 7 Oscillator - 2 in 1

```
( If((ROC(C,12,%)>-1.5),If((ROC(C,12,%)>-3),
If((ROC(C,12,%)>-4.5),((H-(H-L)*1.75)),((H-(H-L)*2.33))),((H-(H-L)*3.5))),(H-(H-L))) ) -
( If((ROC(C,12,%)> 1.5),If((ROC(C,12,%)> 3),
If((ROC(C,12,%)> 4.5),(((H-L)*1.75)+L),(((H-L)*2.33)+L)),(((H-L)*3.5)+L)),((H-L)+L)) )
```

RVI w / Simple Moving Average

```
100*
 mov(if(C,>,ref(C,-1),std(C,10),0),14,S)/
(mov(if(C,>,ref(C,-1),std(C,10),0),14,S)+
 mov(if(C,<,ref(C,-1),std(C,10),0),14,S))
```

Same Direction

```
If(C>Ref(C,-1) AND Ref(C,-1)>Ref(C,-2),PREV+1,
If(C<Ref(C,-1) AND Ref(C,-1)<Ref(C,-2),PREV-1,
If(C>Ref(C,-1) AND Ref(C,-1)<=Ref(C,-2),1,
If(C<Ref(C,-1) AND Ref(C,-1)>=Ref(C,-2),-1,
0))))
```

Semi-Intelligent Oscillator - CCT

```
2.5*Dema(Mov(C,3,E)-Ref(Mov(C,3,E),-3),10)
```

SeqSETUP w/Validation day

```
{BUY SETUP}
If((C < Ref(C,-4) AND
Ref(C,-1) < Ref(C,-5) AND
Ref(C,-2) < Ref(C,-6) AND
Ref(C,-3) < Ref(C,-7) AND
Ref(C,-4) < Ref(C,-8) AND
Ref(C,-5) < Ref(C,-9) AND
Ref(C,-6) < Ref(C,-10) AND
Ref(C,-7) < Ref(C,-11) AND
Ref(C,-8) < Ref(C,-12) AND
{Validation Day}
Ref(C,-9) > Ref(C,-13) ),1,0);
{SELL SETUP}
If((C > Ref(C,-4) AND
Ref(C,-1) > Ref(C,-5) AND
Ref(C,-2) > Ref(C,-6) AND
Ref(C,-3) > Ref(C,-7) AND
Ref(C,-4) > Ref(C,-8) AND
Ref(C,-5) > Ref(C,-9) AND
Ref(C,-6) > Ref(C,-10) AND
Ref(C,-7) > Ref(C,-11) AND
Ref(C,-8) > Ref(C,-12) AND
{Validation Day}
Ref(C,-9) < Ref(C,-13) ),-1,0)
```

SeqINTERSECTION

```
{DeMark says this is now ELECTIVE in futures and index markets}

L <= Ref(HHV(H,6),-3) AND L >= Ref(LLV(L,6),-3) OR
H >= Ref(LLV(L,6),-3) AND H <= Ref(HHV(H,6),-3)
```

SeqCdB/S (Countdown for Buys and Sells)

```
{plots +1 for BUYS, plots -1 for SELLS.}
If(C < Ref(L,-2),1,0) ;
If(C > Ref(H,-2),-1,0)
```

Shifted TSMA Indicator

```
TSMA:= Mov(CLOSE,5,TIMESERIES);
ShiftedTSMA:= Ref(TSMA, -1) + 2;
ShiftedTSMA
```

Short Volume Wave

```
if(oscv(1,50,S,%),>,0, if(V,>,ref(V,-1),1,0),0)
```

Simple Moving Average with Resistance and Support

by Dennis L. Tilley

Resistance and Support

```
LookBack := Input("Look Back Periods",1,1000,10);
Resistance :=ValueWhen(1,Cross(Mov(C, LookBack,S),C),HHV(H, LookBack));
Support :=ValueWhen(1,Cross(C,Mov(C, LookBack,S)),LLV(L, LookBack));
Resistance;
Support;
```

Resistance and Support * F

```
PrCnt:=Input("Percentage",0,100,10);
LookBack:= Input("Look Back Periods",1,1000,10);
Resistance:=ValueWhen(1,Cross(Mov(C,LookBack,S),C),HHV(H,LookBack));
Support:=ValueWhen(1,Cross(C,Mov(C,LookBack,S)),LLV(L,LookBack));
Resistance * ((100-prcnt)/100);
Support * ((prcnt/100)+1);
```

Sine Wave

```
Ref(Sin( Cum(360/28) ), -12)
```

Sine-Wave Weighted Moving Average

```
PI:=3.1415926;
SD:=180/6;
S1:=Sin(1*180/6)*C;
S2:=Sin(2*180/6)*Ref(C,-1);
S3:=Sin(3*180/6)*Ref(C,-2);
S4:=Sin(4*180/6)*Ref(C,-3);
```

```
S5:=Sin(5*180/6)*Ref(C,-4);
Num:=S1+S2+S3+S4+S5;
Den:=Sin(SD)+Sin(2*SD)+Sin(3*SD)+Sin(4*SD)+Sin(5*SD);
Num/Den
```

Single 60-day Period BreakOut Signal-indicator

```
ClxA:= C;
ClxB:= Ref(HHV(H,59), -1);
ClxC:= HHV(H,60);
SSDPBOS:= (ClxA > ClxB) AND (Ref(C,-1)<ClxB) AND (H=ClxC);
SSDPBOS
```

Slope/Close Indicator

```
10000* LinRegSlope(CLOSE,63)/CLOSE
```

Slope of a 14 day

```
((14 * (Sum(Cum(1) * C ,14) ) ) - (Sum(Cum(1),14) * (Sum(C,14) ) ) ) /
((14 * Sum(Pwr(Cum(1),2),14 ) ) - Pwr(Sum(Cum(1),14),2) )
```

Slope of a 25 day MA

```
((Sum(Cum(1) * Mov(C,25,S),14)) - (Sum(Cum(1),14) * Sum(Mov(C,25,S),14) / 14)) /
((Sum(Power(Cum(1),2),14)) - (Power(Sum(Cum(1),14),2) / 14) )
```

Slope of a 14 Day Linear Regression Line

```
((Sum(Cum(1) * ((14*Sum(Cum(1) * C,14) - Sum(Cum(1),14) * Sum(C,14)) /
(14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)) *
Cum(1) + (Mov(C,14,S) - Mov(Cum(1),14,S) * (14 * Sum(Cum(1) * C,14) -
Sum(Cum(1),14) * Sum(C,14)) / (14 * Sum(Pwr(Cum(1),2),14)- Pwr(Sum(Cum(1),14),2)))),14)) -
(Sum(Cum(1),14) * Sum(((14 * Sum(Cum(1) * C,14) -Sum(Cum(1),14) *
Sum(C,14)) / (14 * Sum(Pwr(Cum(1),2),14) -Pwr(Sum(Cum(1),14),2)) *
Cum(1) + (Mov(C,14,S) - Mov(Cum(1),14,S) * (14 * Sum(Cum(1) * C,14) -Sum(Cum(1),14) *
Sum(C,14)) / (14 * Sum(Pwr(Cum(1),2),14) - Pwr(Sum(Cum(1),14),2)))),14) / 14)) /
((Sum(Power(Cum(1),2),14)) - (Power(Sum(Cum(1),14),2)/ 14))
```

Slope of a Linear Regression Line

```
tp:=Input("Time Periods",1,200,21);
((tp*(Sum(Cum(1)*C,tp)))-(Sum(Cum(1),tp)*(Sum(C,tp))))/
((tp*Sum(Pwr(Cum(1),2),tp))-Pwr(Sum(Cum(1),tp),2))
```

SMI (13,25,2)

```
q:=Input("Lookback Periods?",1,1000,13);
r:=Input("First EMA Periods?",1,100,25);
sm:=Input("Second EMA Periods?",1,100,2);
100 *
(mov(mov(C-(0.5*(hhv(H,q)+llv(L,q))),r,E),sm,E) /
(0.5*mov(mov(hhv(H,q)-llv(L,q),r,E),sm,E)))
```

Smoothed Adapative Stochastic Oscillator

```
n:=Input("**Volatility** lookback length",1,50,20);
x:=Input("%K smoothing (exponential smoothing)",1,50,3);
y:=Input("%D smoothing (exponential smoothing)",1,50,3);
lenmax:=28;
lenmin:=7;
v1:=Stdev(C,n);
v2:=HHV(v1,n);
v3:=LLV(v1,n);
v4:=((v1-v3)/(v2-v3));
currlen:=(Int(lenmin+(lenmax-lenmin)*(1-v4)));
hh:=HHV(H,LastValue(currlen));
ll:=LLV(L,LastValue(currlen));
RawStochK:=((C-ll)/(hh-ll))*100;
SmoothedStochK:=Mov(RawStochK,x,E);
StochD:=Mov(SmoothedStochK,y,E);
20;
80;
StochD;
SmoothedStochK;
```

Smoothed DMI Index (20 Period MA) (#028a)

```
Mov(PDI(14)-MDI(14),20,S)
```

Smoothed Moving Average

```
X:=Input("Time Periods",1,1000,14);
Wilders(C,LastValue(X))
```

Smoothing Techniques by Tim Tillson

ILRS

```
Periods:=Input("Periods?",2,63,11);
Size:=LastValue(Cum(1));
Start:=LastValue(Ref(Mov(P,Periods,S),Periods-Size));
Cum(LinRegSlope(P,Periods))+Start;
```

T3

```
Periods:=Input("Periods?",1,63,5);
a:=Input("Hot?",0,2,.7);
```

```
e1:=Mov(P,Periods,E);
e2:=Mov(e1,Periods,E);
e3:=Mov(e2,Periods,E);
e4:=Mov(e3,Periods,E);
e5:=Mov(e4,Periods,E);
e6:=Mov(e5,Periods,E);
c1:=-a*a*a;
c2:=3*a*a+3*a*a*a;
c3:=-6*a*a-3*a-3*a*a*a;
c4:=1+3*a+a*a*a+3*a*a;
c1*e6+c2*e5+c3*e4+c4*e3;
```

Smoothed Tick Momemtum Line

```
mov(roc(cum(if(C,>,ref(mov(C,10,E),-1),+1,if(C,<,ref(mov(C,10,E),-1),-1,0))),5,$),5,E)
```

Special TRIX

```
trix(12)-ref((trix(12)),-1)
```

Squat Bar Variable Example

```
MarketFacilition:=(H-L)/V;
IncreasingVolume:=V > Ref(V,-1);
```

MarketFacilition < Ref(MarketFacilition,-1) AND IncreasingVolume

Standard Deviation Bands

```
stdh := Mov(C,20,E)+2*(Stdev(C,20));
stdl := Mov(C,20,E)-2*(Stdev(C,20));
stdh;
stdl
```

21 Period Upper Band (smoothed)

```
Mov((21 * Sum(Cum(1) * C,21) - Sum(Cum(1),21) * Sum(C,21)) /
(21 * Sum(Pwr(Cum(1),2),21) - Pwr(Sum(Cum(1),21),2))* Cum(1) +
(Mov(C,21,S) - Mov(Cum(1),21,S) * (21 * Sum(Cum(1)* C,21) -
Sum(Cum(1),21) * Sum(C,21))/ (21 * Sum(Pwr(Cum(1),2),21)-
Pwr(Sum(Cum(1),21),2))) +2*(Sqrt(((Sum(Power(C,2),21)-
Power(Sum(C,21),2)/21))- ((Sum(Cum(1)*C,21))-((Sum(Cum(1),21)*Sum(C,21)/21)))/
((Sum(Power(Cum(1),2),21)) - (Power(Sum(Cum(1),21),2)/21)) *
((Sum(Cum(1)*C,21))-((Sum(Cum(1),21)*Sum(C,21)/21))))/19),3,S)
```

Period Lower Band (smoothed)

```
Mov((21 * Sum(Cum(1) * C,21) - Sum(Cum(1),21) * Sum(C,21)) /
(21 * Sum(Pwr(Cum(1),2),21) - Pwr(Sum(Cum(1),21),2))* Cum(1) +
```

```
(Mov(C,21,S) - Mov(Cum(1),21,S) * (21 * Sum(Cum(1)* C,21) - Sum(Cum(1),21) *
Sum(C,21))/ (21 * Sum(Pwr(Cum(1),2),21) -Pwr(Sum(Cum(1),21),2))) -
2*(Sqrt(((Sum(Power(C,2),21)-(Power(Sum(C,21),2)/21))-((Sum(Cum(1)*C,21))-
((Sum(Cum(1),21) * Sum(C,21)/21))) / ((Sum(Power(Cum(1),2),21))-
(Power(Sum(Cum(1),21),2)/21))*((Sum(Cum(1)*C,21))-
((Sum(Cum(1),21)*Sum(C,21)/21)))) /19)),3,S)
```

21 Period R2 (smoothed)

```
Mov((Pwr(Corr(Cum(1),C,21,0),2)),3,S)
```

21 Period Regression Slope

```
(((Sum(Cum(1)*C,21))-(Sum(Cum(1),21)*Sum(C,21)/21)) /
((Sum(Power(Cum(1),2),21))-(Power(Sum(Cum(1),21),2)/21)))
```

21 Period %A

```
((C-Fml("21 Period Lower Band (smoothed)"))/
(Fml("21 Period Upper Band (smoothed)") -
Fml("21 Period Lower Band (smoothed)")))
```

Spread & Volatility

```
hv1:=Input("30 day historical volatility of first security",0,100,0.5);
hv2:=Input("30 day historical volatility of second security",0,100,0.5);
r:=Input("correlation coefficient of these securities",0,100,0.5);
vf:=Input("volatility factor",0,5,1.5);
p1:= Security("ATVI", C );
p2:= Security("THQI", C );
```

{For MetaStock 6.52 or end-of-day users, change the above two lines to:

```
p1:= p;
p2:= C;
```

This version is more readily adaptable to any security pair, but it requires more care in plotting it. The modified version requires you to insert the prices of the one security into the chart of the other. Then you must plot this indicator on the prices you just inserted.) To continue with the code: }

```
newday:=ROC(DayOfWeek(),1,$)<>0;
yp1:=ValueWhen(1,newday, Ref(p1,-1));
yp2:=ValueWhen(1,newday, Ref(p2,-1));
sprd:= (p1/yp1) - (p2/yp2);
vb:=(hv1 + hv2) * Power(1/252,0.5) * (1-r);
sprd;
vb*vf;
Neg(vb*vf)
```

STARC - SToller Average Range Channels

```
LMOV:= Input("Dlugość Średniej -",2,100,6);
LATR:= Input("Dlugość ATR -",2,100,15);
KATR:= Input("Krotność ATR -",0.1,10,2);

;{Upp} Mov(C,LMOV,S) + ( KATR *  ATR(LATR) )
;{Mid} Mov(C,LMOV,S)
;{Low} Mov(C,LMOV,S) - ( KATR *  ATR(LATR) )
```

STIX Indicator

```
Mov((H+L)/2,5,S)-Mov((H+L)/2,35,S)
```

STIX Oscillator – WGPW

```
Mov(((Security("X.WSE-A",O)) / ((Security("X.WSE-A",O)) +
(Security("X.WSE-D",O)))) * 100,21,E)
```

Stochastic %D

```
Mov( ( ( ( C - LLV( L,14 ) ) /( HHV( H,14 )- LLV( L,14 ) ) ) * 100 ) ,3 ,S ) Stochastic Example of hhv()
Function

( sum( C - llv(L,5), 3 ) / sum( hhv(H,5) -llv(L,5), 3) ) * 100
```

Stochastic Momentum (0-100)

```
(( Mo(14) - LLV( Mo(14), 14)) / (( HHV( Mo(14),14)) - LLV( Mo(14), 14)))*100
```

Stochastic Momentum Indicator

```
100 * ( Mov( Mov(C - (.5 * ( HHV(H,13) + LLV(L,13))),25,E),2,E)/
(.5*Mov(Mov( HHV(H,13) - LLV(L,13),25,E),2,E)))
```

Stochastic and RSI System

```
Mov((RSI(8)-LLV(RSI(8),8))/(HHV(RSI(8),8)-(LLV(RSI(8),8))),5,w)*100
```

Stochastic Momentum - Plex

```
;{SMI-Plex:=}
StochMomentum(2,1,2) + StochMomentum(3,2,1) +
StochMomentum(4,2,3) + StochMomentum(5,3,5) +
StochMomentum(8,21,13) + StochMomentum(13,25,2)
;{SMI13E-Plex:=}
Mov(StochMomentum(2,1,2) + StochMomentum(3,2,1) +
```

```
StochMomentum(4,2,3) + StochMomentum(5,3,5) +
StochMomentum(8,21,13) + StochMomentum(13,25,2),13,E)
```

Stochastic Oscillator - Custom

```
KPERIODS := Input("%K Time Periods",1,20,5);
KSLOW := Input("%K Slowing",1,20,3);
DPERIODS := Input("%D Time Periods",1,20,3);
K :=100*(Sum(CLOSE - LLV(LOW,KPERIODS),KSLOW))/
(Sum(HHV(HIGH,KPERIODS)-LLV(LOW,KPERIODS),KSLOW));
D := Mov(K,DPERIODS,S);
K;
D;
```

Stochastic %K

```
Per1:=Input("length of stoch",1,100,14);
((CLOSE - LLV(L,Per1))/(HHV(H,Per1)-LLV(L,Per1)))*100
```

Stochastic %d

```
Per1:=Input("length of stoch",1,100,14);
Per2:=Input("length of ma",1,100,3);
Mov((((CLOSE-LLV(L,Per1))/(HHV(H,Per1)-LLV(L,Per1)))*100),Per2,S)
```

Slow Stochastic %D

```
Per1:=Input("length of stoch",1,100,14);
Per2:=Input("length of ma1",1,100,3);
Per3:=Input("length of ma2",1,100,3);
Mov((Mov((((CLOSE-LLV(L,Per1))/(HHV(H,Per1)-LLV(L,Per1)))*100),Per2,S)),Per3,S)
```

Stochastic Oscillator - Custom II - 3 in 1

{Stochastic %K}

```
Per1a:=Input("length of stoch %K",1,100,14);
((CLOSE - LLV(L,Per1a))/(HHV(H,Per1a)-LLV(L,Per1a)))*100;
```

{Stochastic %d}

```
Per1b:=Input("length of stoch %d",1,100,14);
Per2b:=Input("length of ma",1,100,3);
Mov((((CLOSE-LLV(L,Per1b))/(HHV(H,Per1b)-LLV(L,Per1b)))*100),Per2b,S);
```

{Slow Stochastic %D}

```
Per1c:=Input("length of stoch %D",1,100,14);
Per2c:=Input("length of ma1",1,100,3);
Per3c:=Input("length of ma2",1,100,3);
Mov((Mov((((CLOSE-LLV(L,Per1c)) / (HHV(H,Per1c)-LLV(L,Per1c)))*100),Per2c,S)),Per3c,S);
```

Stochastic PVT

```
Mov((PVT()-LLV(PVT(),19)) / (HHV(PVT(),19)-LLV(PVT(),19)), 5, S);
Mov(Mov((PVT()-LLV(PVT(),19)) / (HHV(PVT(),19)-LLV(PVT(),19)), 5, S),3,S);
```

Stochastic Relative Strength Index I

```
( ( RSI( 14) - LLV( RSI( 14 ),14 ) ) / ( ( HHV( RSI(14) ,14 ) ) - LLV(RSI(14),14 ) ) )
```

Stochastic RSI Customisable

```
mp1:=Input("RSI Periods",1,377,13);
mp2:=Input("Stoch Periods",1,377,13);
mp3:=Input("Slowing Periods",1,377,1);
mp4:=Input("EMA Periods",1,377,5);
Mov(Sum((RSI(mp1)-LLV(RSI(mp1),mp2)),mp3)/
Sum((.0000001+(HHV(RSI(mp1),mp2)-(LLV(RSI(mp1),mp2)))),mp3),mp4,E)*100
```

Stochastic RSI - Tema Smoothed

```
Periods := Input("Enter Tema Smoothing Periods",5,233,13);
Tema(((RSI(Periods) - LLV(RSI(Periods),Periods))/
((0.0001+HHV(RSI(Periods),Periods)) -
LLV(RSI(Periods),Periods))) -0.5,Periods)
```

Stochastic RSI - Various Options

```
Mov((RSI(14)-LLV(RSI(14),9))/(HHV(RSI(14),9)-(LLV(RSI(14)+.00001,6))),4,E)*100
```

Stochastic Smoothed

```
H1:=80;
H2:=20;
H1;
H2;
P1:=Mov(((C-LLV(L,10))/(HHV(H,10)-LLV(L,10)))*100,3,E);
Mov(((P1-LLV(P1,10))/(HHV(P1,10)-LLV(P1,10)))*100,3,E)
```

Stochastic - Brann

```
hm5:=HHV(Mov(H,5,E),5);
lm5:=LLV(Mov(L,5,E),5);
cm5:=Mov(C,5,E);

(cm5-lm5)/(hm5-lm5)
```

Stochastic Wave Long

```
if(ref(stoch(14,3),-1),=,llv(stoch(14,3),3),2, if(stoch(14,3),=,llv(stoch(14,3),3),1,0))
```

Stochastic Wave Short

```
if(ref(stoch(14,3),-1),=,hhv(stoch(14,3),3),2, if(stoch(14,3),=,hhv(stoch(14,3),3),1,0))
```

StochCMO

```
mp1:=Input("RSI Periods",1,377,13);
mp2:=Input("Stoch Periods",1,377,13);
mp3:=Input("Slowing Periods",1,377,1);
mp4:=Input("EMA Periods",1,377,5);

 Mov(
 Sum((CMO(c,mp1) - LLV(CMO(c,mp1),mp2)),mp3) /
 Sum((.0000001+(HHV(CMO(c,mp1),mp2) -
(LLV(CMO(c,mp1),mp2)))),mp3),mp4,E) * 100
```

StochPVT

```
;Mov((PVT()-LLV(PVT(),19)) / (HHV(PVT(),19)-LLV(PVT(),19)), 5, S)
{Fast line}
;Mov(Mov((PVT()-LLV(PVT(),19)) / (HHV(PVT(),19)-LLV(PVT(),19)), 5, S),3,S)
{Slow Line}
```

StochRSI 'Alert' Levels I

```
((RSI(21)-LLV(RSI(21),8))/((HHV(RSI(21),13))-LLV(RSI(21),13)))
```

StochRSI 'Alert' Levels II

```
((RSI(21)-LLV(RSI(21),21))/((HHV(RSI(21),21))-LLV(RSI(21),21)))
```

StochRSI 'Alert' Levels III

```
((RSI(14)-LLV(RSI(14),14))/((HHV(RSI(14),14))-LLV(RSI(14),14)))
```

StochRSI 'Alert' Levels IV

```
Mov((RSI(21)-LLV(RSI(21),13))/(HHV(RSI(21),8)-(LLV(RSI(21)+.00001,13))),8,E) * 100
```

StochRSI 'Alert' Levels V

```
Mov((RSI(5)-LLV(RSI(5),5))/(HHV(RSI(5),5)- (LLV(RSI(5),5))),3,E)*100
```

StochRSI 'Alert' Levels VI

```
Mov((RSI(13)-LLV(RSI(13),13))/(HHV(RSI(13),13)- (LLV(RSI(13),13))),3,E)*100
```

StochRSI Oscillator - Craig DeHaan

```
mp1:=Input("RSI Periods",1,377,13);
mp2:=Input("Stochastic Periods",1,377,13);
mp3:=Input("Smoothing Periods",1,377,8);
mat:=Input("MA Type: S, E, W",1,3,2); {1=S,2=E,3=W}
If(mat=1, Mov((RSI(mp1)-LLV(RSI(mp1),mp2)) /
(.0000001+ HHV(RSI(mp1),mp2) - LLV(RSI(mp1),mp2)),mp3,S)*100,
If(mat=2, Mov((RSI(mp1)-LLV(RSI(mp1),mp2)) /
(.0000001+HHV(RSI(mp1),mp2)-LLV(RSI(mp1),mp2)),mp3,E)*100,
If(mat=3, Mov((RSI(mp1)-LLV(RSI(mp1),mp2)) /
(.0000001+ HHV(RSI(mp1),mp2)-LLV(RSI(mp1),mp2)),mp3,W)*100,0)))
```

StTO - Short-term Trend Oscillator

```
Lb:=Input("Smoothing Period?",1,60,5);
Num:=C-Ref(C,-1);
Den:=H-L;
Mn:=If(Mov(Num,Lb,S)=0,.01,Mov(Num,Lb,S));
Md:=If(Mov(Den,Lb,S)=0,.01,Mov(Den,Lb,S));
(Mn/Md)*100
```

Stop Loss Indicator

```
periodsshort:=Input("periods if short",1,50,10);
periodslong:=input("periods if long",1,50,10);

HHV(H,periodsshort)-atr(periodsshort);
{stop loss level for short positions}
LLV(L,periodslong)+ATR(periodslong);
{stoploss level for long positions}
```

Summation Noise Indicator

```
(sum(abs(C-ref(C,-1)),14)-sum(abs(mov(C,10,S)-ref(mov(C,10,S),-1)),14))/ sum(abs(C-ref(C,-1)),14)
```

Support and Resistance

```
LookBack := Input("Look Back Periods",1,1000,10);
Resistance :=ValueWhen(1,Cross(Mov(C, LookBack,
S),C),HHV(H, LookBack));
Support :=ValueWhen(1,Cross(C,Mov(C, LookBack,
S)),LLV(L, LookBack));
Resistance;
Support;
```

Support and Resistance Levels

```
AVd:=If(CLOSE>Ref(Peak(1,H,1) ,-1),
{then}1,
{else}If(CLOSE<Ref(Trough(1,L,1),-1),
{then}-1,
{else}0));
ANv:=ValueWhen(1,AVd<>0,AVd);
SuRe:=If(ANv=-1,
{then}Peak(1,H,1),
{else}Trough(1,L,1));
SuRe;
```

Swing Chart

```
If( High > Ref(High,-1) AND
Low > Ref(Low,-1), High, If( High < Ref(High,-1) AND
Low < Ref(Low,-1), Low, PREV))
```

Tar(SZ)an Long

```
C-(((462*Mov(C,34,E))-(420*Mov(C,13,E))+(490*(Mov(Mov(C,13,E)-Mov(C,34,E),89,E))))/42)
```

Tar(SZ)an Short

```
(C-(((325*Mov(C,26,E))-(297*Mov(C,12,E))+(351*Mov(Mov(C,13,E)-Mov(C,26,E),9,E))))/28)*2
```

Tema PV Binary Wave

PVBW01

```
{Higher Highs and Lows}
If(HHV(L,8) = HHV(L,21),1,0) +
If(HHV(L,21) = HHV(L,55),2,0) +
If(HHV(L,55) = HHV(L,233),3,0) +
If(HHV(H,8) = HHV(H,21),1,0) +
If(HHV(H,21) = HHV(H,55),2,0) +
If(HHV(H,55) = HHV(H,233),3,0)
```

PVBW02

```
{Lower Highs & Lows}
If(LLV(H,8) = LLV(H,21),-1,0) +
If(LLV(H,21) = LLV(H,55),-2,0) +
If(LLV(H,55) = LLV(H,233),-3,0) +
If(LLV(L,8) = LLV(L,21),-1,0) +
If(LLV(L,21) = LLV(L,55),-2,0) +
If(LLV(L,55) = LLV(L,233),-3,0)
```

PVBW03

```
{High V Up Move}
If(Mov(V,3,S) > 1.13*Mov(V,21,S),1,0) * If(C > Ref(H,-1),3,0)
```

PVBW04

```
{High V Down Move}
If(Mov(V,2,S) > 1.13*Mov(V,21,S),1,0) * If(C < Ref(L,-1),-3,0)
```

PVBW05

```
{New 233 Day High}
((If(Mov(V,2,S) > 1.13*Mov(V,21,S),1,0)) * If((H = HHV(H,233)),7,0))
```

PVBW06

```
{New 233 Day Low}
((If(Mov(V,2,S) > 1.13*Mov(V,21,S),1,0)) * If((L = LLV(L,233)),-7,0))
```

PVBW07

```
{Price Look Back}
If(C>=Ref(C,-13),1,-1) +
If(C>=Ref(C,-15),1,-1) +
If(C>=Ref(C,-17),1,-1) +
If(C>=Ref(C,-19),1,-1) +
If(C>=Ref(C,-21),1,-1)
```

PVBW Add

```
Fml("PVBW01") + Fml("PVBW02") +
Fml("PVBW03") + Fml("PVBW04") +
Fml("PVBW05") + Fml("PVBW06") +
Fml("PVBW07")
```

Tema PV Binary Wave

```
Tema(Fml("PVBW Add"),34)
```

Thrust Oscilator - WIG

```
AI:= Security("X.WSE-A",C);
AV:= Security("X.WSE-A",V);
DecI:= Security("X.WSE-D",C);
DecV:= Security("X.WSE-D",V);
TO:=(((AI*AV)-(DecI*DecV))/((AI*AV)+(DecI*DecV)))*100;
Periods1:=Input("length1",3,100,21);
Periods2:=Input("length2",3,100,5);
IND:=Mov(TO,Periods1,S);
sig:=Mov(IND,Periods2,S);
sig;
IND;
```

Tick Line Momentum Oscillator

```
Mov(
```

```
 ROC(
  Cum(
   If( C ,> ,Ref( Mov(C ,10 ,E) ,-1 ) ,+1 ,
   If( C ,< ,Ref( Mov(C ,10 ,E) ,-1 ) ,-1 ,0 ) ) )
  ,5 ,$)
 ,5 ,E)
```

Tight and Narrow Range High & Low

```
If((5 * HHV(HIGH,5) - Sum(HIGH,5)) + (Sum(L,5) - 5 * LLV(LOW,5)) < 2 * (HHV(HIGH,5) -
LLV(LOW,5)),HHV(HIGH,5), Peak( 1, Cross(.0001,If((5* HHV(HIGH,5) - Sum(HIGH,5)) +
(Sum(L,5) - 5 * LLV(LOW,5)) < 2 * (HHV(HIGH,5)- LLV(LOW,5)) ,1,0)) *
Ref(HHV(HIGH,5),-1),1));

If((5 * HHV(HIGH,5) - Sum(HIGH,5)) + (Sum(L,5) - 5 * LLV(LOW,5)) < 2 * (HHV(HIGH,5) -
LLV(LOW,5)),LLV(LOW,5), Peak( 1, Cross(.0001,If((5* HHV(HIGH,5)- Sum(HIGH,5)) +
(Sum(L,5) - 5 * LLV(LOW,5)) < 2 * (HHV(HIGH,5)- LLV(LOW,5)),1,0)) *
Ref(LLV(LOW,5),-1),1));
```

Time Segmented Volume

```
{TSV..plot with MA of 9}
(Sum(If( C, >,Ref(C,-1), +V*C-Ref(C,-1),If(C,<,Ref(C,-1),-V*C-Ref(C,-1),0)),18{18}))
```

Trading Chanel Index

```
  Mov(((( ((( H + L + C ) / 3) -
( Mov( (( H +L + C ) / 3) ,10 ,E ) +
( Mov( Ref( (( H + L + C ) / 3),-1 ) ,10 ,E) ))) /
( 0.015 *(Mov( ((( H + L + C ) / 3) -
( Mov(((( H + L + C ) / 3) ,10 ,E ) +
( Mov( Ref( (( H + L + C ) / 3),-1 ) ,10 ,E) ))) ,10 ,E ) +
( Mov( Ref( (( H + L + C ) / 3) -
( Mov( ((H + L + C ) / 3) ,10 ,E ) +
( Mov( Ref( (( H + L + C ) / 3),-1 ) ,10 ,E) )),-1 ) ,10 ,E ) ))) )) ,21 ,E ) +
( Mov( Ref( (( ((( H + L + C ) / 3) -
( Mov(((( H + L + C ) / 3) ,10 ,E ) +
( Mov( Ref( (( H + L + C ) / 3),-1 ) ,10 ,E) ))) /
( 0.015 *(Mov( ((( H + L + C ) / 3) -
( Mov( (( H + L + C ) / 3) ,10 ,E ) +
( Mov(Ref( (( H + L + C ) / 3),-1 ) ,10 ,E ) ))) ,10 ,E ) +
( Mov( Ref( (( H + L + C ) / 3) -
( Mov( ((H + L + C ) / 3) ,10 ,E ) +
( Mov( Ref( (( H + L + C ) / 3),-1 ) ,10 ,E) )),-1 ) ,10 ,E ) ))) )),-1 ) ,21 ,E ) )
```

Trading Day of the Month

```
If(DayOfMonth() = 1, TRUE, If(DayOfMonth()=2 AND
(DayOfWeek()=1 OR Month()=1), TRUE, If( DayOfMonth()=3 AND
```

```
DayOfWeek()=1, TRUE, FALSE)))
```

Trading the Trend I

```
Pds:=21;
Mult:=3;
TruRan:=Mov(ATR(1),Pds,W)*Mult;
HiLimit:=HHV(H,Pds)-TruRan;
LoLimit:=LLV(L,Pds)+TruRan;
If(C>HiLimit,HiLimit,LoLimit)
```

Trading the Trend II

```
VOLAInd :=Mov(ATR(21),1,W)*3;
If(C>Ref(C,-21) AND C>VOLAInd, HHV(H,21)-Ref(VOLAInd,-1), Ref(VOLAInd,-1)+LLV(L,21))
```

Trailing Stop by Andrzej Herman

```
strata:=10;
    If(
      C=PREV,
      PREV,
      If(
        ((Ref(C,-1)<PREV)AND (C<PREV)),
        Min(PREV,C*(1+strata/100)),
        If(
          (Ref(C,-1)>PREV) AND (C>PREV),
          Max(PREV,C*(1-strata/100)),
          If(
            C>PREV,
            C*(1-strata/100),
            C*(1+strata/100)
          )
        )
      )
    )
```

Trailing Stop Loss Indicator

```
If(cum(1)=1,
{then} Close,
{else} If((C*1.1) <= PREV,
{then}(C*1.1),
{else} PREV));
```

Trailing Stop Indicator III by Adam Hefner

```
If(cum(1)=1,
{then} Close,
 {else} If((C*1.1) <= PREV,
```

```
 {then}(C*1.1),
  {else} PREV));
```

Trailing Stops - Volatility-Based

Volatility Stop (Long)

```
Pds1:= Input("ATR Lookback?",2,100,10);
Mult:= Input("ATR Multiplier?",1,20,3);
Pds2:= Input("HHV Lookback?",2,100,20);
PrelimStop:= HHV(H,Pds1) - ATR(Pds1)*Mult;
ActualStop:= HHV(PrelimStop,Pds2);
ActualStop
```

Volatility Stop (Short)

```
Pds1:= Input("ATR Lookback?",2,100,10);
Mult:= Input("ATR Multiplier?",1,20,3);
Pds2:= Input("LLV Lookback?",2,100,20);
PrelimStop:= LLV(L,Pds1) + ATR(Pds1)*Mult;
ActualStop:= LLV(PrelimStop,Pds2);
ActualStop
```

Trailing Stop

```
{For long}
HHV(H - 2.5*ATR(5),10)
```

Trend Analysis Index

```
((HHV(Mov(C,28,S),5)-LLV(Mov(C,28,S),5))/C)*100
```

Trend Continuation Factor by M.H. Pee

+TCF

```
pc:=If(ROC(C,1,$)>0,ROC(C,1,$),0);
nc:=If(ROC(C,1,$)<0,Neg(ROC(C,1,$)),0);
ncf:=If(nc=0,0,PREV+nc);
Sum(pc,35)-Sum(ncf,35)
```

-TCF

```
pc:=If(ROC(C,1,$)>0,ROC(C,1,$),0);
nc:=If(ROC(C,1,$)<0,Neg(ROC(C,1,$)),0);
pcf:=If(pc=0,0,PREV+pc);
Sum(nc,35)-Sum(pcf,35)
```

Position

```
pc:=If(ROC(C,1,$)>0,ROC(C,1,$),0);
```

```
nc:=If(ROC(C,1,$)<0,Neg(ROC(C,1,$)),0);
pcf:=If(pc=0,0,PREV+pc);
ncf:=If(nc=0,0,PREV+nc);
ptcf:=Sum(pc,35)-Sum(ncf,35);
ntcf:=Sum(nc,35)-Sum(pcf,35);
If(ptcf>0,1, If(ntcf>0,-1, PREV));
```

Trend Detection Index

```
x:=Input("number of periods", 5,50,20);
am:= Abs(C-Ref(C,-(x-1)));
td:= Sum(C-Ref(C,-(x-1)),x);
tdi:= (Abs(td)+Sum(am,x))-Sum(am,(2*x));
status:= If(tdi>0, If(td>0,1,-1), PREV);
tdi;
td;
status*LastValue(Highest(Max(Abs(tdi),Abs(td))))
```

Trend Intensity Index

```
x:=Input("number of periods", 5,100,30);
ma:=Mov(C,2*x,S);
sdp:=Sum(If(C-ma>0, C-ma,0),x);
sdm:=Sum(If(ma-C>0, ma-C,0),x);
(sdp/(sdp + sdm)) * 100
```

Trend Intensity Index - Trade Position

```
x:=Input("number of periods", 5,100,30);
ma:=Mov(C,2*x,S);
sdp:=Sum(If(C-ma>0, C-ma,0),x);
sdm:=Sum(If(ma-C>0, ma-C,0),x);
tii:= (sdp/(sdp + sdm)) * 100;
If(tii>=80, 1, If(tii<=20,-1, 0))
```

Trend Verification Index

```
Input("Plot a Horizontal Line",0,100,3.33);
aa:=Mov(CLOSE,8,S);
ba:=Mov(CLOSE,55,S);
ca:=Abs(aa-ba);
da:=100*ca/ba;
da;
```

Trending Bandini

```
Mov(C,2,S)>
```

```
Mov(Mov(C,2,S),2,S) AND
Mov(Mov(C,2,S),2,S)>
Mov(Mov(Mov(C,2,S),2,S),2,S) AND
Mov(Mov(Mov(C,2,S),2,S),2,S)>
Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S) AND
Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S)>
Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S)AND
Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S)>
Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),2,S)AND
Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),2,S)>
Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),2,S),2,S) AND
Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),2,S),2,S)>
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S) AND
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S)>
Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(Mov(C,2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S),2,S)
```

Trendline Formula

```
Trough(1,L,10) + ((((Trough(1,L,10)-Trough(2,L,10)) /
(TroughBars(2,L,10)-TroughBars(1,L,10))) * TroughBars(1,L,10)))
```

_Triple MA

```
ShortTime := 25;
MediumTime := 75;
LongTime := 200;
ShortMA := Mov(CLOSE, ShortTime, S);
MediumMA := Mov(CLOSE, MediumTime, S);
LongMA := Mov(CLOSE, LongTime, S);
ShortMA; MediumMA; LongMA;
```

_Triple MA Crossovers

```
Sma := FmlVar("_Triple MA","ShortMA");
Mma := FmlVar("_Triple MA","MediumMA");
Lma := FmlVar("_Triple MA","LongMA");
LongSignal := Cross(Sma, Mma) AND Lma > Mma;
ShortSignal := Cross(Mma, Sma) AND Lma < Mma;
```

_Triple MA Positions

```
BuyLong := FmlVar("_Triple MA Crossovers", "LongSignal");
SellShort := FmlVar("_Triple MA Crossovers", "ShortSignal");

If(
BarsSince(Ref(BuyLong,-1)) <= BarsSince(Ref(SellShort,-1)), +1,
If(
BarsSince(Ref(SellShort,-1)) <= BarsSince(Ref(BuyLong,-1)), -1,0)
);
```

_Triple MA Equity

```
Cum(
Cum(
If(
 FmlVar("_Triple MA Crossovers","LongSignal")= 1,
  OPEN-Ref(OPEN,-1),
   If(FmlVar("_Triple MA Crossovers","ShortSignal")=-1,
    -1 * OPEN-Ref(OPEN,-1),0
   )
  )
 )
)
```

TRIX - Timeseries

```
CLA:=TRIX(3);
CLB:=Ref(TRIX(3),-1);
CLC:=Mov(TRIX(3),8,TIMESERIES);
CLD:=Ref(Mov(TRIX(3),8,TIMESERIES),-1);
SHORT:=When(CLA,>,CLC) AND When(CLB,<,CLD)AND
When(CLA,<,0)AND When(CLA,>,-2);
LONG:=When(CLA,<,CLC) AND When(CLB,>,CLD)AND
When(CLA,>,0)AND When(CLA,<,+2);
If(LONG>0,+1,
If(SHORT>0,-1,PREVIOUS))
```

True Range & High-Low Range on Real Time Hourly Charts

High-Low Range on RTH Charts

```
MktStart:=Hour()<Ref(Hour(),-1);
yestHiVal:=ValueWhen(1,MktStart,
        Ref(HighestSince(1,MktStart,H),-1));
yestLoVal:=ValueWhen(1,MktStart,
        Ref(LowestSince(1,MktStart,L),-1));
yestHiVal-yestLoVal
```

True Range on RTH Charts

```
MktStart:=Hour()<Ref(Hour(),-1);
opn:=ValueWhen(1,MktStart,O);
yestLoVal:=ValueWhen(1,MktStart,
        Ref(LowestSince(1,MktStart,L),-1));
yestHiVal:=ValueWhen(1,MktStart,
        Ref(HighestSince(1,MktStart,H),-1));
If(opn>yestHiVal,opn-yestLoVal,
If(opn<=yestHiVal AND opn>yestLoVal,yestHiVal-yestLoVal,
If(opn<yestLoVal,yestHiVal-opn,
If(opn>=yestLoVal AND opn<yestHiVal,yestHiVal-yestLoVal,0))))
```

PriHiLoClo

```
MktStart:=Hour()<Ref(Hour(),-1);
yestClo:= Ref(C,-1);
yestHi:= Ref(HighestSince(1,MktStart,H),-1);
yestLo:= Ref(LowestSince(1,MktStart,L),-1);
ValueWhen(1,MktStart,yestClo);
ValueWhen(1,MktStart,yestLo);
ValueWhen(1,MktStart,yestHi);
```

True Range Formula

```
(H - L + Abs(H - Ref(C,-1)) + Abs(L - Ref(C,-1)) )/2
```

True Range Moving Average

```
Mov( (H+L+C)/3, 10, SIMPLE )
```

TSI Moving Average

```
Mov((100*(Mov(Mov(Roc(C,1,$),25,E),13,E)/Mov(Mov(Abs(Roc(c,1,$)),25,E),13,E))),20,E)
```

True Strength Index II

```
rr:= Input("first smoothing r" ,1 ,100 ,25 );
ss:= Input("second smoothing s",1 ,100 ,13 );
uu:= Input("third smoothing u" ,1 ,100 ,1 );

numerator:=100*(Mov(Mov(Mov(ROC(C,1,$),rr,E),ss,E),uu,E));
denominator:=Mov(Mov(Mov(Abs(ROC(C,1,$)),rr,E),ss,E),uu,E);
If(denominator<>0,numerator/denominator,0);
```

Ultimate Oscillator

```
(((((Sum((Max((C - L) , (C - Ref(L,-1)))),7)) /
(Sum((Max(Max((H - L) ,H - Ref(L ,-1)) ,Max(( Ref(H ,-1) - L) , (Ref(H ,-1) - Ref(L,-1))))) ,7)))*4)+
(((Sum((Max((C - L) , (C - Ref(L ,-1) ))),14)) /
(Sum((Max(Max((H - L) ,H - Ref(L ,-1)) ,Max(( Ref(H ,-1) - L) , (Ref(H ,-1) - Ref(L,-1))))) ,14)))*2)+
((Sum((Max(( C - L) , (C - Ref( L ,-1) ))),28)) /
(Sum((Max( Max(( H - L) ,H - Ref( L ,-1)) ,Max(( Ref(H ,-1) - L) , (Ref(H ,-1) - Ref(L,-1))))) ,28))))/ 7) *
100
```

Up/Down Volume

```
Sum(If(C > Ref(C,-1),V,0),50) / Sum(If(C <Ref(C,-1),V,0),50)
```

Upside Downside Ratio

```
xxx:= Input("Moving Average -",2,999,10);
Mov( Security("X.NYSE-A",V) / ( Security("X.NYSE-D",V)),xxx,S)
```

Uptrend Signal

```
Peak(1,If(H>Ref(HHV(H,4),-1),Ref(LLV(L,4),-1),0),1) <>
Ref(Peak(1,If(H>Ref(HHV(H,4),-1),Ref(LLV(L,4),-1),0),1),-1)
```

Downtrend Signal

```
Peak(1,If(L<Ref(LLV(L,4),-1),Ref(HHV(H,4),-1),0),1) <>
Ref(Peak(1,If(L<Ref(LLV(L,4),-1),Ref(HHV(H,4),-1),0),1),-1)
```

Uptrend / Downtrend Signals - Final Plot

```
If(BarsSince(Fml("Downtrend Signal")) <BarsSince(Fml("Uptrend Signal")),
{then} Ref(HHV(H,4),-1), {else} Ref(LLV(L,4),-1))
```

VIC 5 Day's Price Disparity Oscillator

```
cv:= Input("Odległość bazowa w sesjach   -",2,1000,5);

( ( (Ref(CLOSE,-1) ) - (Ref(CLOSE,-(cv+1)) ) ) +
  ( (Ref(CLOSE,-2) ) - (Ref(CLOSE,-(cv+2)) ) ) +
  ( (Ref(CLOSE,-3) ) - (Ref(CLOSE,-(cv+3)) ) ) +
  ( (Ref(CLOSE,-4) ) - (Ref(CLOSE,-(cv+4)) ) ) +
  ( (Ref(CLOSE,-5) ) - (Ref(CLOSE,-(cv+5)) ) ) +
  ( (Ref(CLOSE,-6) ) - (Ref(CLOSE,-(cv+6)) ) ) +
  ( (Ref(CLOSE,-7) ) - (Ref(CLOSE,-(cv+7)) ) ) +
  ( (Ref(CLOSE,-8) ) - (Ref(CLOSE,-(cv+8)) ) ) +
  ( (Ref(CLOSE,-9) ) - (Ref(CLOSE,-(cv+9)) ) ) ) +
  (  C - (Ref(CLOSE,-15 ) ) )
```

VIC 7 Step's Probability Oscillator - Revisited

```
{1}   (If(H > Ref(H,-1),1, {lub} If(L < Ref(L,-1),-1,0)) )
{2} + (If(O > Ref(C,-1),1, {lub} If(O < Ref(C,-1),-1,0)) )
{3} + (If(C > O,1, {lub} If(C < O,-1,0)) )
{4} + (If(C > ((H+L)/2),1, {lub} If(C < ((H+L)/2),-1,0)) )
{5} + (If(C > O,1 {lub}, If(C < O,-1,0)) )
{6} + (If(L > Ref(L,-1),1, {lub} If(H < Ref(H,-1),-1,0)) )
{7} + (If(C > Ref(H,-1),1, {lub} If(L < Ref(L,-1),-1,0)) )
```

Vidya with Volatility Bands

```
K:=Stdev(C,5)/Mov(Stdev(C,5),20,S);
SC:=0.9;
Vidya:=SC*K*C+(1-SC*K)*Ref(C,-1);
UpperBand:=Vidya+2*.5*K;
LowerBand:=Vidya-2*.5*K;
UpperBand;
LowerBand;
Vidya;
```

VidyaUpTo64 by Jan Willem Robert

DaysCMO10

```
Int(0.5*Abs(Mov(CMO(C,10),3,S)))
{I use a bit of smoothing, else the # of days changes too abruptly.}
```

VidyaDays

```
Fml("DaysCMO10")
{Fml("DaysRsquared") } {(another one to play around with)}
```

Vidya00_15

```
x:= Fml("VidyaDays");
If(x>15,
0
{else: Present Range},
If(x<8,
If(x<4,
If(x<2,
Mov( C, 1, E ) {an interesting MA, isn't it}
{# else x>=2},
If(x<3,
Mov( C, 2, E )
{# else},
Mov( C, 3, E )
)
){x<2?}
{# else x>=4},
If(x<6,
If(x<5,
Mov( C, 4, E )
{# else},
Mov( C, 5, E )
)
{# else x>=6},
If(x<7,
Mov( C, 6, E )
{# else},
Mov( C, 7, E )
)
){x<6?}
){x<4?}
{# else x>=8},
If(x<12,
If(x<10,
If(x<9,
Mov( C, 8, E )
{# else},
Mov( C, 9, E )
)
```

```
{# else x>=10},
If(x<11,
Mov( C, 10, E )
{# else},
Mov( C, 11, E )
)
){x<10?}
{# else x>=12},
If(x<14,
If(x<13,
Mov( C, 12, E )
{# else},
Mov( C, 13, E )
)
{# else x>=14},
If(x<15,
Mov( C, 14, E )
{# else},
Mov( C, 15, E )
)
){x<14?}
){x<12?}
){x<8?}
)
```

Vidya16_31

```
x:= Fml("VidyaDays");
If(x<16 OR x>31,
0
{else: Present Range},
If(x<24,
If(x<20,
If(x<18,
If(x<17,
Mov( C, 16, E )
{# else},
Mov( C, 17, E )
)
{# else x>=18},
If(x<19,
Mov( C, 18, E )
{# else},
Mov( C, 19, E )
)
){x<18?}
{# else x>=20},
If(x<22,
If(x<21,
Mov( C, 20, E )
{# else},
Mov( C, 21, E )
)
```

```
{# else x>=22},
If(x<23,
Mov( C, 22, E )
{# else},
Mov( C, 23, E )
)
){x<22?}
){x<20?}
{# else x>=24},
If(x<28,
If(x<26,
If(x<25,
Mov( C, 24, E )
{# else},
Mov( C, 25, E )
)
{# else x>=26},
If(x<27,
Mov( C, 26, E )
{# else},
Mov( C, 27, E )
)
){x<26?}
{# else x>=28},
If(x<30,
If(x<29,
Mov( C, 28, E )
{# else},
Mov( C, 29, E )
)
{# else x>=30},
If(x<31,
Mov( C, 30, E )
{# else},
Mov( C, 31, E )
)
){x<30?}
){x<28?}
){x2<24?}
)
```

Vidya32_47

```
x:= Fml("VidyaDays");
If(x<32 OR x>47,
0
{else: Present Range},
If(x<40,
If(x<36,
If(x<34,
If(x<33,
Mov( C, 32, E )
{# else},
```

```
Mov( C, 33, E )
)
{# else x>=34},
If(x<35,
Mov( C, 34, E )
{# else},
Mov( C, 35, E )
)
){x<34?}
{# else x>=36},
If(x<38,
If(x<35,
Mov( C, 36, E )
{# else},
Mov( C, 37, E )
)
{# else x>=38},
If(x<39,
Mov( C, 38, E )
{# else},
Mov( C, 39, E )
)
){x<38?}
){x<36?}
{# else x>=40},
If(x<44,
If(x<42,
If(x<41,
Mov( C, 40, E )
{# else},
Mov( C, 41, E )
)
{# else x>=42},
If(x<43,
Mov( C, 42, E )
{# else},
Mov( C, 43, E )
)
){x<42?}
{# else x>=44},
If(x<46,
If(x<45,
Mov( C, 44, E )
{# else},
Mov( C, 45, E )
)
{# else x>=46},
If(x<47,
Mov( C, 46, E )
{# else},
Mov( C, 47, E )
)
){x<46?}
```

```
){x<44?}
){x<40?}
)
```

Vidya48_63

```
x:= Fml("VidyaDays");
If(x<32 OR x>63,
0
{else: Present Range},
If(x<56,
If(x<52,
If(x<50,
If(x<49,
Mov( C, 48, E )
{# else},
Mov( C, 49, E )
)
{# else x>=50},
If(x<51,
Mov( C, 50, E )
{# else},
Mov( C, 51, E )
)
){x<50?}
{# else x>=52},
If(x<54,
If(x<53,
Mov( C, 52, E )
{# else},
Mov( C, 53, E )
)
{# else x>=54},
If(x<55,
Mov( C, 54, E )
{# else},
Mov( C, 55, E )
)
){x<54?}
){x<52?}
{# else x>=56},
If(x<60,
If(x<58,
If(x<57,
Mov( C, 56, E )
{# else},
Mov( C, 57, E )
)
{# else x>=58},
If(x<59,
Mov( C, 58, E )
{# else},
Mov( C, 59, E )
```

```
)
){x<58?}
{# else x>=60},
If(x<62,
If(x<61,
Mov( C, 60, E )
{# else},
Mov( C, 61, E )
)
{# else x>=62},
If(x<63,
Mov( C, 62, E )
{# else x>=63!!!},
Mov( C, 63, E )
)
){x<62?}
){x<60?}
){x<56?}
)
```

VidyaUpTo64

```
x:=Fml("VidyaDays");
If(x<5,
{Arbitrarily use 5 days as the minimum time frame}
Mov(C,5,E)
{else},
If(x>=64,
{64 days is the maximum we can handle (so far)}
Mov(C,64,E)
{else},
If(x<32,
If(x<16,
Fml("Vidya00_15")
{else x>=16},
Fml("Vidya16_31")
)
{else x>=32},
If(x<48,
Fml("Vidya32_47")
{else x>=48},
Fml("Vidya48_63")
)
)
)
)
```

Volatility % Indicator

```
Lookback := Input("Time Periods",1,1000,50);
```

```
HighVolatility := Input("High Volatility %",.01,100,3);
100 * Sum(100 * ATR(1)/CLOSE > HighVolatility,Lookback)/Lookback
```

Volatility as Percent

```
Mov(((ATR(14) / C)* 100), 20, S)
```

Volatility Channel

```
cv:= Input("Długość MM  -",1,100,14);
;HHV(  ( ( ( (H+L+C) / 3 ) * 2 ) - H)  , cv)
;LLV(  ( ( ( (H+L+C) / 3 ) * 2 ) - L)  , cv)
```

Volatility Difference

```
mov(H-L,1,S)/mov(H-L,20,S)
```

Volatility Exits

```
Dir:= Mov(C, 10, E) - Mov(C, 11, E);
Dir1:= Ref(Mov(C, 10, E) - Mov(C, 11, E),-1);

s2:=HHV(H, 5) - 2*ATR(10);
s21:=Ref((HHV(H, 5) - 2*ATR(10)),-1);
ss2:=LLV(L, 5) + 2*ATR(10);
ss21:=Ref((LLV(L, 5) + 2*ATR(10)),-1);

If( dir>=0, If(dir1<0,s2,Max(s2,s21)), If(dir1>=0,ss2,Min(ss2,ss21)));

s4:=HHV(H, 5) - 4*ATR(10);
s41:=Ref(HHV(H, 5) - 4*ATR(10),-1);
ss4:=LLV(L, 5) + 4*ATR(10);
ss41:=Ref(LLV(L, 5) + 4*ATR(10),-1);

If( dir>=0, If(dir1<0,s4,Max(s4,s41)), If(dir1>=0,ss4,Min(ss4,ss41)));
```

Volatility Stop II

```
{ LONG (Chande & Kroll) (code supplied by HHP)}
Pds1:= Input("ATR Lookback?",2,100,10);
Mult:= Input("ATR Multiplier?",1,20,3);
Pds2:= Input("HHV Lookback?",2,100,20);
PrelimStop:= HHV(H,Pds1) - ATR(Pds1)*Mult;
ActualStop:= HHV(PrelimStop,Pds2);
ActualStop
```

Volatility Trade In Gold by David Landry

David Landry Historical Volatility

```
Num:=Input("Number Of Periods For Numerator",1,100,4);
```

```
Den:=Input("Number Of Periods For Denominator",2,1000,100);
Std(Log(C/Ref(C,-1)),Num)/Std(Log(C/Ref(C,-1)),Den)
```

David Landry Average Historical Volatility

```
Den:=Input("Number Of Periods For Denominator",2,1000,100);
((Std(Log(C/Ref(C,-1)),4)/Std(Log(C/Ref(C,-1)),Den))+
(Std(Log(C/Ref(C,-1)),6)/Std(Log(C/Ref(C,-1)),Den))+
(Std(Log(C/Ref(C,-1)),10)/Std(Log(C/Ref(C,-1)),Den)))/3
```

David Landry EMA of Historical Volatility

```
Den:=Input("Number Of Periods For Denominator",2,1000,100);
EMA:=Input("Number Of Periods For EMA",2,100,12);
Mov(((Std(Log(C/Ref(C,-1)),4)/Std(Log(C/Ref(C,-1)),Den))+
(Std(Log(C/Ref(C,-1)),6)/Std(Log(C/Ref(C,-1)),Den)) +
(Std(Log(C/Ref(C,-1)),10)/Std(Log(C/Ref(C,-1)),Den)))/3,LastValue(EMA),E)
```

Volume % Above / Below 10 day Moving Average

```
(V-mov(V,10,S))/mov(V,10,S)
```

Volume Accumulation Percentage

```
Periods:=Input("Time Periods",1,60,21);
X:=(2*C-H-L)/(H-L);
TVA:=Sum(V*x,Periods);
TV:=Sum(V,Periods);
VA:=100*TVA/TV;
VA
```

Volume – Advance / Decline in 2 Colors

```
;If(V> Ref(V,-1 ),V,0)
;If(V< Ref(V,-1 ),V,0)
```

Volume Float Indicator

```
mp1:=Input("Days Volume Summed",1,377,30);
mf1:=Input("Float, in X million",.1,10000,10);
mf2:=mf1*1000000;
(Sum(V,mp1)/mf2)*100;
```

Volume-Weighted Average Price by George Reyna

VWAP (Approximation)

```
sm:=Input("starting month",1,12,1);
sd:=Input("starting day of month",1,31,1);
```

```
sy:=Input("starting year",1980,2100,2000);
d1:= sd=DayOfMonth() AND sm=Month() AND sy=Year();
pv:=MP()*Cum(V);
denom:= If(Cum(V)-ValueWhen(1,d1,V)=0,1,Cum(V)-ValueWhen(1,d1,V));

If(BarsSince(d1),(pv)/denom, MP())
```

VWAP Support/Resistance

```
sm:=Input("starting month",1,12,1);
sd:=Input("starting day of month",1,31,1);
sy:=Input("starting year",1980,2100,2000);
start:= sd=DayOfMonth() AND sm=Month() AND sy=Year();
pv:=MP()*V;
denom:= If(Cum(V)-ValueWhen(1,start,Cum(V))=0,1,Cum(V)-ValueWhen(1,start,Cum(V)));

If(BarsSince(start),(Cum(pv)-ValueWhen(1,start,Cum(pv)))/ denom,MP())
```

Wallie's 20% Stop Loss Indicator

```
MINUS:= CCI(14) * .80;
PLUS:= CCI(14) * 1.20;
MINUS;
PLUS;
```

Weekly High Low Wave

```
if(H,>,ref(hhv(H,40),-1),1, if(L,<,ref(llv(L,40),-1), -1,0))
```

Weekly Momentum for DAILY Chart

```
n:=Input("Periods",1,20,10);{start week}
sw:=If(DayOfWeek()<=Ref(DayOfWeek(),-1),1,0);
(ValueWhen(1,sw>0,Ref(C,-1)) / ValueWhen(n+1,sw>0,Ref(C,-1)))*100
```

Weekly Oscillator Segment

```
mov(oscp(43,86,S,%),43,S)
```

Weekly Patterns

Tuesday XX Pattern

```
{ Looks for XX pattern, returns +1 if it finds it }
If(Ref(DayOfWeek(),-2) = 5 {2 days ago was Fri} AND
Ref(DayOfWeek(),-1) = 1 {Yesterday was Mon}
AND
DayOfWeek() = 2 {Today is Tuesday}
AND { Either both days were up or down }
((Ref(CLOSE,-2) > Ref(CLOSE,-1) AND
Ref(CLOSE,-1) > CLOSE ) OR
(Ref(CLOSE,-2) < Ref(CLOSE,-1) AND
```

```
Ref(CLOSE,-1) < CLOSE )) ,
+1, { +1 if XX pattern }
0) { Otherwise 0 }
```

Tuesday XO Pattern

```
{ Looks for XO pattern, returns +1 if it finds it }
If(Ref(DayOfWeek(),-2) = 5 {2 days ago was Fri} AND
Ref(DayOfWeek(),-1) = 1 {Yesterday was Mon}
AND
DayOfWeek() = 2 {Today is Tuesday}
AND { Tuesday is opposite direction of Monday }
((Ref(CLOSE,-2) > Ref(CLOSE,-1) AND
Ref(CLOSE,-1) < CLOSE ) OR
(Ref(CLOSE,-2) < Ref(CLOSE,-1) AND
Ref(CLOSE,-1) > CLOSE )) ,
+1, { +1 if XO pattern }
0) { Otherwise 0 }
```

Tuesday % occurrence. of XX vs. XO

```
{ Gives the % occurrence of XX (that Tuesday goes the same direction as Monday) }
Cum(Fml("Tuesday XX pattern"))/
(Cum(Fml("Tuesday XX pattern")) + Cum(Fml("Tuesday XO pattern")) ) * 100
```

Weekly Pivot Point

```
Dw:=If(DayOfWeek()<=Ref(DayOfWeek(),-1),1,0);
{Weekly Typical Price}
PP1:=If(Dw=1,
{then}(Ref(HighestSince(1,Dw=1,H),-1)+
Ref(LowestSince(1,Dw=1,L),-1) +
Ref(C,-1))/3,
{else}0);
{Weekly High}
Wh1:=If(Dw=1,
{then}Ref(HighestSince(1,Dw=1,H),-1),
{else}0);
{Weekly Low}
Wl1:=If(Dw=1,
{then}Ref(LowestSince(1,Dw=1,L),-1),
{else}0);
Wh:=ValueWhen(1,Wh1>0,Wh1);
Wl:=ValueWhen(1,Wl1>0,Wl1);
PP:=ValueWhen(1,PP1>0,PP1);
{Resistance 1}
R1:=(2*PP)-Wl;
{Support 1}
S1:=(2*PP)-Wh;
{Resistance 2}
R2:=(PP-S1)+R1;
{Support 2}
```

```
S2:=PP-(R1-S1);
R2;
R1;
S1;
S2;
```

Wkly Stoch 5 per %K, slowing=3, no %D - I

```
{start week}
sw:=If(DayOfWeek()<=Ref(DayOfWeek(),-1),1,0);
yestClo:=If(sw>0,Ref(C,-1),0);
{lowest low last 5 weeks}
LLow:=(ValueWhen(1,sw>0, Ref(LowestSince(5,sw>0=1,L),-1)));
{highest high last 5 weeks}
HHigh:=(ValueWhen(1,sw>0,Ref(HighestSince(5,sw>0,H),-1)));
{5 per %K, slowing=3}
y:=(ValueWhen(1,sw>0,(yestClo-LLow)) +
     ValueWhen(2,sw>0,(yestClo-LLow)) +
      ValueWhen(3,sw>0,(yestClo-LLow)))/
((
 ValueWhen(1,sw>0,HHigh) +
  ValueWhen(2,sw>0,HHigh) +
   ValueWhen(3,sw>0,HHigh)) -
  (ValueWhen(1,sw>0,LLow) +
  ValueWhen(2,sw>0,LLow) +
 ValueWhen(3,sw>0,LLow))) * 100;
y;
```

Wkly Stoch 5 per %K, slowing=3, no %D - II

```
{start week}
sw:=If(DayOfWeek()<=Ref(DayOfWeek(),-1),1,0);
yestClo:=If(sw>0,Ref(C,-1),0);
{lowest low last 5 weeks}
LLow:=(ValueWhen(1,sw>0, Ref(LowestSince(5,sw>0=1,L),-1)));
{highest high last 5 weeks}
HHigh:=(ValueWhen(1,sw>0, Ref(HighestSince(5,sw>0,H),-1)));
{5 per %K, slowing=3}
y:=(ValueWhen(1,sw>0,(yestClo-LLow)) +
     ValueWhen(2,sw>0,(yestClo-LLow)) +
      ValueWhen(3,sw>0,(yestClo-LLow))) /
((ValueWhen(1,sw>0,HHigh) +
   ValueWhen(2,sw>0,HHigh) +
    ValueWhen(3,sw>0,HHigh)) -
  (ValueWhen(1,sw>0,LLow) +
  ValueWhen(2,sw>0,LLow) +
 ValueWhen(3,sw>0,LLow)))*100;
{This plots the 3 period %D (ma) of the above.}
z:=(ValueWhen(1,sw>0,y) +
     ValueWhen(2,sw>0,y) +
```

```
    ValueWhen(3,sw>0,y)) / 3;
z
```

Wilder's ATR

```
periods:=Input("ATR Periods?",1,100,10);
TH:=If(Ref(C,-1) > H,Ref(C,-1),H);
TL:=If(Ref(C,-1) < L,Ref(C,-1),L);
TR:=TH-TL;
Wilders(TR,periods)
```

Wilder's Volatility Index

```
(13 * Prev + ATR(1)) / 14
```

Williams' Accumulation/Distribution

```
TrueRangeHigh:=Max( Ref(CLOSE,-1), HIGH );
TrueRangeLow:=Min( Ref(CLOSE,-1), LOW );
Cum(If(C > Ref(C,-1),C-TrueRangeLow, If(C < Ref(C,-1),C-TrueRangeHigh,0)))
```

Williams %R Modified

```
Periods := Input("Time Period", 3,50,5);
NumDev := Input("No. of Standard Deviations", 1,5,2);

(100*(C-BBandBot(C, Periods, S, NumDev))/
((( BBandTop(C, Periods, S,NumDev))-
(BBandBot(C, Periods, S, NumDev)))))
```

Williams %R - Similar

```
Periods := Input("Time Period", 3,50,5);
NumDev := Input("No. of Standard Deviations", 1,5,2);

(100*(C-BBandBot(C, Periods, S, NumDev)) /
((( BBandTop(C, Periods, S, NumDev))-(BBandBot(C, Periods, S, NumDev)))))
```

William's Sentiment Index

```
TrueRangeHigh:=Max(Ref(CLOSE,-1),HIGH);
TrueRangeLow:=Min(Ref(CLOSE,-1),LOW);

(Mov(CLOSE,9,S)-Mov(TrueRangeLow,9,S))/
(Mov(TrueRangeHigh,9,S)-Mov(TrueRangeLow,9,S))*100
```

WillSpread by Larry Williams

Using version 6.5 of MetaStock for Windows, please follow these steps.

- Plot the underlying commodity.

- Drag the Spread Indicator from the indicator quicklist to this commodity chart.
- Select either Tbonds or Tbills as the security touse to spread. I recommend you plot this in a new inner window.
- Drag the Price Oscillator from the indicator quicklist and drop it on the SPREAD plot, not the price plot. The parameters Mr. Williams' uses are 7 and 11 time period exponential moving averages.You also want to use "points" as the method. This plot is the WillSpreadindicator.
- At this point, you may change the Spread Indicatorplot's color to match the background of the chart, or perhaps move theWillSpread indicator to a separate inner window.

If you save this first effort as a template, perhapsnamed WillSpread, you are able to apply this template to any commodity you wish and the indicator will be automatically calculated against that commodity. You may also use the "Next Security" functionwithin MetaStock for Windows to view each of your commodities by setting the options for next security to "Keep line studies". If you apply this template to the first commodity in your futures folder, you may then use the right arrow to move down the folder contents.
Each new commodity will have the WillSpread calculated as it is loaded.

WinMidas - Ammended Code

```
eMonth:=Input("Enter the Month - MM",1,12,1);
eDate:=Input("Enter the Date - DD",1,31,1);
eYear:=Input("Enter the Year - YYYY",1900,2100,2001);
numdays:=BarsSince(DayOfMonth()=eDate AND
Month() =eMonth AND Year()=eYear);

pvol:=Typical()*V;
cumpv:=Cum(pvol);
cumvol:=Cum(V);
basecumpv:=ValueWhen(1, numdays=1, Ref(cumpv,-1));
basecumvol:=ValueWhen(1, numdays=1, Ref(cumvol,-1));

sr1:=cumpv-basecumpv;
sr2:=cumvol-basecumvol;
sr:=sr1/sr2;
sr;
```

WinMidas - Support and Resistance Levels

```
eMonth:=Input("Enter the Month-MM",1,12,1);
eDate:=Input("Enter the Date-DD",1,31,1);
eYear:=Input("Enter the Year-YYYY",0,2100,0);
numdays:=BarsSince(DayOfMonth()=eDate AND  Month() =eMonth AND Year()=eYear);
pvol:=MP()*V;
cumpv:=Cum(pvol);
cumvol:=Cum(V);

basecumpv:=ValueWhen(1, numdays=0, cumpv);
basecumvol:=ValueWhen(1, numdays=0, cumvol);

sr1:=cumpv-basecumpv;
sr2:=cumvol-basecumvol;
```

```
sr:=sr1/sr2;
WinM:=If(   (sr=0), L,   sr);
WinM;
```

Year to Date Gain/Loss (Percent)

```
a:=C<0;
ytd:=ValueWhen(1,Year()<>Ref(Year(),-1),C);
bs:=BarsSince(Year()<>Ref(Year(),-1))+1;
lvbs:=LastValue(Cum(1))-LastValue(bs);
If(Cum(1)=LVBS),ROC(C,LastValue(BS+PREV-PREV),%))
```

Zero Lag EMA

```
Period:= Input("What Period",1,250,10);
EMA1:= Mov(P,Period,E);
EMA2:= Mov(EMA1,Period,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA:= EMA1 + Difference;
ZeroLagEMA
```

Zero Lag MACD

```
EMA1:= Mov(CLOSE,13,E);
EMA2:= Mov(EMA1,13,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA13:= EMA1 + Difference;
EMA1:= Mov(CLOSE,21,E);
EMA2:= Mov(EMA1,21,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA21:= EMA1 + Difference;
ZeroLagMACD:=ZeroLagEMA13 - ZeroLagEMA21;
ZeroLagMACD
```

Zero Lag MACD Trigger Signal

```
{ To be used with the ZeroLag MACD above }
EMA1:= Mov(CLOSE,13,E);
EMA2:= Mov(EMA1,13,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA13:= EMA1 + Difference;
EMA1:= Mov(CLOSE,21,E);
EMA2:= Mov(EMA1,21,E);
Difference:= EMA1 - EMA2;
ZeroLagEMA21:= EMA1 + Difference;
ZeroLagMACD:=ZeroLagEMA13 - ZeroLagEMA21;
EMA1:= Mov(ZeroLagMACD,8,E);
EMA2:= Mov(EMA1,8,E);
Difference:= EMA1 - EMA2;
ZeroLagTRIG:= EMA1 + Difference;
ZeroLagTRIG
```

ZigZag - Custom

```
HighReversal:= Input("Reversal Amount-Highs", .01, 99, 1);
LowReversal:= Input("Reversal Amount-Lows", .01, 99, 1);
PeakDistance:= Round((PeakBars(2,H,HighReversal) - PeakBars(1,H, HighReversal)) * 1.28);
TroughDistance:= Round((TroughBars(2,L,LowReversal)-TroughBars(1,L,LowReversal)) * 1.28);

If(PeakBars(1,H,HighReversal) < TroughBars(1,L,LowReversal),
{Then} If(TroughBars(1,L,LowReversal) = PeakDistance,1,0),
{Else} If(PeakBars(1,H,HighReversal) = TroughDistance,-1,0))
```

ZigZag Symmetry

```
V1:=Input("% Change",.1,50,2);
P1:=PeakBars(1,C,V1);
T1:=TroughBars(1,C,V1);
ValueWhen(1,P1=0,T1)/ValueWhen(1,T1=0,P1);1
```

ZigZag Validity

```
perc:=Input("Percent",2,100,10);
Z:=Zig(C,perc,%);
last:=ValueWhen(1,
( Z > Ref(Z,-1) AND Ref(Z,-1) < Ref(Z,-2) )
OR
( Z < Ref(Z,-1) AND Ref(Z,-1) > Ref(Z,-2) ),
Ref(Z,-1));
pc:=(C-last) * 100 / last;
pc:= Abs(pc);
SD:=(z>Ref(z,-1) AND Ref(z,-1)>Ref(z,-2)) OR (z<Ref(z,-1) AND
Ref(z,-1)<Ref(z,-2));
res:=If(pc>=perc ,1,0);
If(Alert(res,2) AND SD,1,res);
```

Znormalizowany Współczynnik Zmienności

```
OkresATR:=Input("Podaj okres dla ATR",1,30,3);
OkresZWZ:=Input("Podaj okres dla ZWZ",1,30,3);
OkresPSK:=Input("Podaj okres dla PSK",1,30,3);
ZWZ:=(HHV(ATR(okresATR),OkresZWZ)-ATR(okresATR)) /
(HHV(ATR(okresATR),OkresZWZ)-LLV(ATR(okresATR), OkresZWZ));
Mov(ZWZ,okresPSK,S)
```

# of STD's of Volume

```
(V-mov(V,20,S))/std(V,20)
```

%f Oscillator

```
100*((C-Ref(TSF(C,5),-1))/C)
```

2 - Month's High & Today's Range ....

```
C = HHV(C,40)
{today's current value = highest high value of last 40 days or 2 months}

AND (H-L)
{Today's range}

>= Ref(HHV(H-L,9),-1)
{Yesterday's value of the prior nine day's highest value of the range.}
```

4% Rule

```
If(PREV = 1,
If(CLOSE < HighestSince(1,PREV <> 1,CLOSE)*.96,
-1,PREV),
If(PREV = -1, If(CLOSE>LowestSince(1,PREV <> -1,CLOSE)*1.04,
+1,PREV),
If(PREV = 0, If(CLOSE>Lowest(CLOSE)*1.04,
+1,
If(CLOSE<Highest(CLOSE)*.96,
-1,
PREV)),PREV)))
```

21 Day Trigger

Raschke Oscillator

```
Mov((RSI(8)-LLV(RSI(8),8))/(HHV(RSI(8),8)-(LLV(RSI(8),8))),5,w)*100
```

Ian Oscillator

```
(Mov(C,4,S)-Mov(C,9,S)) + (Mov(C,9,S)-Mov(C,17,S))
```

7 Day Rate of Change

```
((C-Ref(CLOSE,-7))/Ref(CLOSE,-7)*100)
```

%Bands

```
Pds:= 21; {ENTER EMA LENGTH}
Pct:= 2.5; {ENTER PERCENT BANDWIDTH}
MA:= Mov(C,Pds,E);
TBnd:= MA*(1+Pct/100);
LBnd:= MA*(1-Pct/100);
MA; TBnd; LBnd;
```

%BandsCount

```
{USE WITH %BANDS FORMULA}

TBnd:= FmlVar("%Bands","TBND");
IUp:= (H > TBnd) * Ref((H <= TBnd),-1);
CntUp:= IUp + BarsSince(IUp=1) * (H > TBnd);
LBnd:= FmlVar("%Bands","LBND");
IDn:= (L < LBnd) * Ref((L >= LBnd),-1);
CntDn:= IDn + BarsSince(IDn=1) * (L < LBnd);
CntUp; -CntDn;
```

%Bands v.2

```
Pds:= Input("EMA Periods?",1,1000,21);
Pct:= Input("Percentage Bands?",0.1,10,5);
MA:= Mov(C,Pds,E);
TBnd:= MA*(1+Pct/100);
LBnd:= MA*(1-Pct/100);
MA;TBnd;LBnd;
```

%BandsCount v.2

```
Pds:= Input("EMA Periods?",1,1000,21);
Pct:= Input("Percentage Bands?",0.1,10,5);
MA:= Mov(C,Pds,E);
TBnd:= MA*(1+Pct/100);
LBnd:= MA*(1-Pct/100);

IUp:= (H > TBnd) * Ref((H <= TBnd),-1);
CntUp:= IUp + BarsSince(IUp=1) * (H > TBnd);

IDn:= (L < LBnd) * Ref((L >= LBnd),-1);
CntDn:= IDn + BarsSince(IDn=1) * (L < LBnd);
CntUp; -CntDn;
```

$HistVol50Prds_Dly

```
HistVolPrds:= 50;
CLOSEPctChg:= C / Ref(C,-1);
HistVol:= Stdev(CLOSEPctChg,HistVolPrds) *
16.1245155 {annualize} * 100 {convert to %};
HistVol
```

SYSTEM TEST

ADX & Linie Kierunkowe

Open Long:
PDI(opt1) > MDI(opt1) AND ADX(opt1) >Ref(ADX(opt1),-1)

Close Long:
PDI(opt1) < MDI(opt1) AND ADX(opt1) <Ref(ADX(opt1),-1)

Open Short:
PDI(opt1) < MDI(opt1) AND ADX(opt1) <Ref(ADX(opt1),-1)
Close Short:
PDI(opt1) > MDI(opt1) AND ADX(opt1) >Ref(ADX(opt1),-1)

Alligator Trading System

Enter Long:

Cross(C,Fml("Chaos Green BL")) AND
Fml("Chaos Green BL") > Fml("Chaos Blue BL")

Close Long:
Cross(Fml("Chaos Green BL"),C) AND
Fml("Chaos Blue BL") > Fml("Chaos Green BL")

Automatic Support and Resistance Trading System

Enter Long:
Fml("WSO") > Mov(Fml("WSO") , 4 , S) OR Mov(Fml("WRO") , 30 , S) > 95
Stop Out:
Breakeven stop:
Floor level at 2%
Trailing stop:
Profit risk of 10 Percent, ignoring 10 periods
Maximum loss stop:
Maximum loss of 7%
Other Conditions:
Initial equity = 1000,
Long positions only,
Trade price = close,
Trade delay = 0,
Entry commission = 0%,

Exit commission = 0%,
Interest rate = 5%,
Margin req. 100%

AT3

Enter Long

```
Periods:=5;
a:=RSquared(C,opt2);
e1:=Mov(P,Periods,E);
e2:=Mov(e1,Periods,E);
e3:=Mov(e2,Periods,E);
e4:=Mov(e3,Periods,E);
e5:=Mov(e4,Periods,E);
e6:=Mov(e5,Periods,E);
c1:=-a*a*a;
c2:=3*a*a+3*a*a*a;
c3:=-6*a*a-3*a-3*a*a*a;
c4:=1+3*a+a*a*a+3*a*a;
res:=c1*e6+c2*e5+c3*e4+c4*e3;
C<res
```

Close Long

```
Periods:=5;
a:=RSquared(C,opt2);
e1:=Mov(P,Periods,E);
e2:=Mov(e1,Periods,E);
e3:=Mov(e2,Periods,E);
e4:=Mov(e3,Periods,E);
e5:=Mov(e4,Periods,E);
e6:=Mov(e5,Periods,E);
c1:=-a*a*a;
c2:=3*a*a+3*a*a*a;
c3:=-6*a*a-3*a-3*a*a*a;
c4:=1+3*a+a*a*a+3*a*a;
res:=c1*e6+c2*e5+c3*e4+c4*e3;
C>=res
```

Enter Short

```
Periods:=5;
a:=RSquared(C,opt2);
e1:=Mov(P,Periods,E);
e2:=Mov(e1,Periods,E);
e3:=Mov(e2,Periods,E);
e4:=Mov(e3,Periods,E);
e5:=Mov(e4,Periods,E);
e6:=Mov(e5,Periods,E);
c1:=-a*a*a;
```

```
c2:=3*a*a+3*a*a*a;
c3:=-6*a*a-3*a-3*a*a*a;
c4:=1+3*a+a*a*a+3*a*a;
res:=c1*e6+c2*e5+c3*e4+c4*e3;
C>res
```

Close Short

```
Periods:=5;
a:=RSquared(C,opt2);
e1:=Mov(P,Periods,E);
e2:=Mov(e1,Periods,E);
e3:=Mov(e2,Periods,E);
e4:=Mov(e3,Periods,E);
e5:=Mov(e4,Periods,E);
e6:=Mov(e5,Periods,E);
c1:=-a*a*a;
c2:=3*a*a+3*a*a*a;
c3:=-6*a*a-3*a-3*a*a*a;
c4:=1+3*a+a*a*a+3*a*a;
res:=c1*e6+c2*e5+c3*e4+c4*e3;
C<res
```

OPT

Name	Description	Minimum	Maximum	Step	Status
Opt2	Sensitivity	0.1	15	0.1	In use

ANTI Trigger Trading System

Enter long :

```
setbars:=opt1{3};
entryadd:=opt2{1};
ff:=mov(stoch(7,1),3,e);
ss:=mov(Mov(Stoch(10,1),3,E),3,e);
cbuy:=if(ff<=ref(ff,-1) and ss>=ref(ss,-1),cum(1),0);
bbuy:=if(cbuy>=setbars,H+entryadd, 99999);
bbuy<99999
```

Exit long :

```
setbars:=opt1{3};
entryadd:=opt2{1};
exitadd:=opt3{1};
ff:=mov(stoch(7,1),3,e);
ss:=mov(Mov(Stoch(10,1),3,E),3,e);
cbuy:=if(ff<=ref(ff,-1) and ss>=ref(ss,-1),cum(1),0);
bbuy:=if(cbuy>=setbars,H+entryadd, 99999);
lxstop:=if(ref(bbuy,-1)<99999 and h>=ref(bbuy,-1),l-exitadd,l);
c<=lxstop
```

Enter short :
setbars:=opt1{3};
entryadd:=opt2{1};
ff:=mov(stoch(7,1),3,e);
ss:=mov(Mov(Stoch(10,1),3,E),3,e);
csell:=if(ff>=ref(ff,-1) and ss<=ref(ss,-1),cum(1),0);
ssell:=if(csell>=setbars,l-entryadd,0);
ssell>0

Exit short :
setbars:=opt1{3};
exitadd:=opt3{1};
entryadd:=opt2{1};
ff:=mov(stoch(7,1),3,e);
ss:=mov(Mov(Stoch(10,1),3,E),3,e);
csell:=if(ff>=ref(ff,-1) and ss<=ref(ss,-1),cum(1),0);
ssell:=if(csell>=setbars,l-entryadd,0);
sxstop:=if(ref(ssell,-1)>0 and l<=ref(ssell,-1),h+exitadd,h);
c>=sxstop

Base Channel

BaseC

If(Cum(1)<=31,1,(((Stdev(C,30)-Ref(Stdev(C,30),-1))/Stdev(C,30))+1)*PREV)

Enter Long

Cross(H,Ref(HHV(H,20)+Fml("BaseC"),-1))

Enter short

Cross(Ref(LLV(L,20)-Fml("BaseC"),-1),L)

Bianchi Approach

Enter Long:

When(Mov(Mid(C,opt1),opt1,E), > ,Mov(Mid(C,opt1),opt2,E)) AND
When(Ref(Mov(Mid(C,opt1),opt1,E),-1), <= ,(Ref(Mov((Mid(C,opt1)),opt2,E),-1))) AND
When(Mov(Abs((Mo(opt3))),opt4,E), > ,Ref(Mov(Abs((Mo(opt3))),opt4,E),-1))

Enter Short:

When(Mov(Mid(C,opt1),opt1,E) , < ,Mov(Mid(C,opt1),opt2,E)) AND
When(Ref(Mov(Mid(C,opt1),opt1,E),-1), >= ,(Ref(Mov((Mid(C,opt1)),opt2,E),-1))) AND
When(Mov(Abs((Mo(opt3))),opt4,E), > ,Ref(Mov(Abs((Mo(opt3))),opt4,E),-1))

OPT1: 5 to 20 step 1
OPT2: 10 to 16 step 1

OPT3: 5 to 15 step 1
OPT4: 20 to 29 step 1

Binary Wave System

Enter Long :

```
Alert(Cross(Fml("Tema Binary Wave Comp"),
Mov(Fml("Tema Binary Wave Comp"),8,S)),21) AND
HHV(Tema(Qstick(34),34),5) = HHV(Tema(Qstick(34),34),13) AND
Mov(H,21,VAR) > Mov(H,55,VAR)
```

Enter Short :

```
Alert(Cross(-opt2,Fml("Tema Binary Wave Comp")),8) AND
Tema(Qstick(34),34) < -0.1 AND
C < Ref(L,-1) AND
Mov(L,21,VAR) < Mov(L,55,VAR)
```

Close Long :

```
Fml("Tema Binary Wave Comp") < -opt1 AND Tema(Qstick(34),34) < 0 AND
LLV(Mov(L,21,VAR),5) = LLV(Mov(L,21,VAR),13)
```

Close Short :

```
Fml("Tema Binary Wave Comp") > 0 AND Tema(Qstick(34),34) > 0.08
```

Optimization:

Opt 1: Min 3, Max 13, Step 5
Opt 2: Min 3, Max 13, Step 5

Bollinger Band Histogram Trading System

EnterLong = Close Short

```
BBHistogram:= (CLOSE + 2*Std(CLOSE,20) - Mov(CLOSE,20,SIMPLE)) / (4*(Std(CLOSE,20))) *
100;
Cross(0,BBHistogram)
```

Enter Short = Close Long

```
BBHistogram:= (CLOSE + 2*Std(CLOSE,20) - Mov(CLOSE,20,SIMPLE)) / (4*(Std(CLOSE,20))) *
100;
Cross(BBHistogram,100)
```

Breakout_Range2 System

Enter Long:

```
lb:=OPT1; { number of periods in look back }
event:=H > HHV(Ref(H,-1),lb);
If(event AND (Ref(BarsSince(event),-1)>=lb),1, 0 )
```

Stops:
Inactivity:
Positions: Longs
Method: Percent
Minimum Change: 10000
Periods: OPT1

Optimization:

Name: OPT1
Minimum: 2
Maximum: 20
Step: 1

Bull Fear/Bear Fear with DX System

Enter long:

```
n :=opt2{Time periods};
BullFear := (HHV(HIGH,n) - LLV(HIGH,n))/2 + LLV(HIGH,n);
Cross(CLOSE,bullfear) AND
DX(10) > opt1
```

Close long:

```
n :=opt2{Time periods};
BearFear := (HHV(LOW,n) - LLV(LOW,n))/2 + LLV(LOW,n);
CLOSE < bearfear
```

Buy Trigger Trading System

Enter Long:

```
{System Tester options are set to enter on the Close}
BuyTrigger:=(MOV(C,10,E) - MOV(C,30,E)) / MOV(C,30,E);
BuyTrigger > 0.05
```

Close Long:

```
BuyTrigger:=(MOV(C,10,E) - MOV(C,30,E)) / MOV(C,30,E);
BuyPrice:= If(PREV <= 0,
{Then did you go long today?}
If(BuyTrigger > 0.05, CLOSE, 0),
{Else did you exit today?}
If(Close >= PREV*(1+BuyTrigger), -PREV,
PREV));
BuyPrice < 0
```

CCI Moving Average Crossover System Test

Enter Long:

```
When( CCI( opt1 ) ,< ,Mov( CCI( opt1 ) ,opt2 ,E ) ) AND
When( Ref( CCI(opt1),-1) ,>= ,Ref( Mov( CCI( opt1 ) ,opt2 ,E ) ,-1 ) )
```

Enter Short:

```
When( CCI( opt1 ) ,> ,Mov( CCI( opt1 ) ,opt2 ,E ) ) AND
When( Ref( CCI(opt1),-1) ,<= ,Ref( Mov( CCI( opt1 ) ,opt2 ,E ) ,-1 ) )
```

Optimization Variables:

Opt1:
Min = 5 Max = 40 Step = 1

Opt2:
Min = 5 Max = 40 Step = 1

CCI Spike Trading System

Enter long:

```
Ref(CCI(13)/(Mov(CCI(13),3,S)),-1)>1.5 AND
Cross(CCI(13),(Mov(CCI(13),3,S))) AND
Ref(CCI(13),-1)<-25
```

Exit long:

```
Cross((Mov(CCI(13),3,S)),CCI(13)) AND
Ref(CCI(13),-1)>200
```

Chandelier Long Exit

```
LongEntry:= {this your entry system, eg. Cross(CLOSE, Mov(C,20,E))};
MoneyMgmtStop:= {this is your maximum loss, in points};

{DEFINE ENTRY PRICE, WITH EXIT BEING -ENTRY PRICE AND NO TRADE BEING 0}
EntryPrice:= If(PREV <= 0,
{Trade entered today?}
If(LongEntry, CLOSE, 0),
{Trade entered before today. Stopped today?}
If(LOW <= PREV - MoneyMgmtStop, -PREV,
If(LOW <= HighestSince(1,PREV=0, HIGH) - 3 * ATR(10), -PREV,
If(LOW <= HighestSince(1,PREV=0, CLOSE) - 2.5 * ATR(10), -PREV,
PREV))));

{EXIT IF ENTRY PRICE < 0 (MEANING EXIT)}
EntryPrice < 0
```

Chandelier Short Exit

```
ShortEntry:= {this your entry system, eg. Cross(Mov(C,20,E), CLOSE)};
MoneyMgmtStop:= {this is your maximum loss, in points};

{DEFINE ENTRY PRICE, WITH EXIT BEING -ENTRY PRICE AND NO TRADE BEING 0}
EntryPrice:= If(PREV <= 0,
{Trade entered today?}
If(ShortEntry, CLOSE, 0),
{Trade entered before today. Stopped today?}
If(HIGH >= PREV + MoneyMgmtStop, -PREV,
If(HIGH >= LowestSince(1,PREV=0, LOW) + 3 * ATR(10), -PREV,
If(HIGH >= LowestSince(1,PREV=0, CLOSE) + 2.5 * ATR(10), -PREV,
PREV))));

{EXIT IF ENTRY PRICE < 0 (MEANING EXIT)}
EntryPrice < 0
```

Chandelier Exit 2

```
HHVDays:=Input("Days Since Trade Opened",1,300,1);
ATRDays:=Input("ATR Days",1,30,10);
ATRHighMult:=Input("ATR Multiplier From High",1,5,3.0);
ATRCloseMult:=Input("ATR Multiplier From Close",1,5,2.5);
HHVStop:= HHV(H,HHVDays) - ATRHighMult*ATR(ATRDays);
HighStop:= H - ATRHighMult*ATR(ATRDays);
CloseStop:= C - ATRCloseMult*ATR(ATRDays);
TodaysCalc:= If(HighStop > CloseStop, HighStop, CloseStop);
TodaysStop:= If(L <= PREV, TodaysCalc, If(HHVStop < PREV, PREV,If(HHVStop >
C,PREV,HHVStop)));

HHVDays:=Input("Days Since Trade Opened",1,300,1);
ATRDays:=Input("ATR Days",1,30,10);
ATRHighMult:=Input("ATR Multiplier From High",1,5,3.0);
ATRCloseMult:=Input("ATR Multiplier From Close",1,5,2.5);
HHVStop:= HHV(H,HHVDays) - ATRHighMult*ATR(ATRDays);
HighStop:= H - ATRHighMult*ATR(ATRDays);
CloseStop:= C - ATRCloseMult*ATR(ATRDays);
TodaysCalc:= If(HighStop > CloseStop, HighStop, CloseStop);
TodaysStop:= If(L <= PREV, TodaysCalc, If(HHVStop < PREV, PREV,If(HHVStop >
C,PREV,HHVStop)));
TodaysStop
```

Chandelier Exit - Improved

```
LongEntry:={Tu wstaw kryterium otwarcia pozycji};
MoneyMgmtStop:=(Tu wstaw maksymalną stratę w punktach);
vPREV:=PREV;
EntryPrice:= If(vPREV <= 0,
{Trade entered today?}
If(LongEntry, CLOSE, 0),
{Trade entered before today. Stopped today?}
If(LOW <= vPREV - MoneyMgmtStop, -vPREV,
If(LOW <= HighestSince(1,vPREV=0, HIGH) - 3 * ATR(10), -vPREV,
If(LOW <= HighestSince(1,vPREV=0, CLOSE) - 2.5 * ATR(10), -vPREV, vPREV))));
```

Chandelier Exit Variation II

```
Stop1:=If( PREV < L,
{then} If(( H - 3*ATR(10) ) >= PREV,
{then} ( H - 3*ATR(10) ),
{else} PREV),
{else (L <= PREV)}
( H - 3*ATR(10) ));

Stop2:=If( PREV < L,
{then} If(( C - 2.5*ATR(10) ) >= PREV,
{then} ( C - 2.5*ATR(10) ),
{else} PREV),
{else (L <= PREV)}
( C - 2.5*ATR(10) ));

StopVal:=If(Stop1>Stop2,Stop1,Stop2);

StopVal;
```

Combining Trend and Oscillator Signals

ENTER LONG:
C>Mov(C,OPT1,S) AND LinRegSlope(C,OPT2)>LinearReg(LinRegSlope(C ,OPT3),50)

CLOSE LONG:
C<Mov(C,OPT1,S) OR LinRegSlope(C,OPT2)<LinearReg(LinRegSlope(C ,OPT3),50)

ENTER SHORT:
C<Mov(C,OPT1,S) AND LinRegSlope(C,OPT2)<LinearReg(LinRegSlope(C ,OPT3),50)

CLOSE SHORT:
C>Mov(C,OPT1,S) OR LinRegSlope(C,OPT2)>LinearReg(LinRegSlope(C ,OPT3),50)

OPTIMIZE:
OPT1: Minimum 5 Maximum 50 Step 5
OPT2: Minimum 5 Maximum 50 Step 5
OPT3: Minimum 5 Maximum 50 Step 5

Initial Equity: Any amount.
Positions: Long and Short
Trade Price: Close
Trade delay: 0

Commodity Channel Index Buy & Sell Signals

Enter Long:
When(Ref(CCI(14) ,-1) ,> ,-250) AND When(CCI(14) ,< ,-250)

Close Long:
When(enter your criteria here)

Enter Short:

When(Ref(CCI(14) ,-1) ,< ,250) AND When(CCI(14) ,> ,250)

Close Short:
When(enter your criteria here)

Coppock Curve – CCT

(ROC(CLOSE,14 ,percent)*10 + ROC(CLOSE,11,percent)*10 +
ROC(Ref(CLOSE,-1),14,percent)*9+ROC(Ref(CLOSE,-1),11,percent)*9 +
ROC(Ref(CLOSE,-2),14,percent)*8+ROC(Ref(CLOSE,-2),11,percent)*8 +
ROC(Ref(CLOSE,-3),14,percent)*7+ROC(Ref(CLOSE,-3),11,percent)*7 +
ROC(Ref(CLOSE,-4),14,percent)*6+ROC(Ref(CLOSE,-4),11,percent)*6 +
ROC(Ref(CLOSE,-5),14,percent)*5+ROC(Ref(CLOSE,-5),11,percent)*5 +
ROC(Ref(CLOSE,-6),14,percent)*4+ROC(Ref(CLOSE,-6),11,percent)*4 +
ROC(Ref(CLOSE,-7),14,percent)*3+ROC(Ref(CLOSE,-7),11,percent)*3 +
ROC(Ref(CLOSE,-8),14,percent)*2+ROC(Ref(CLOSE,-8),11,percent)*2 +
ROC(Ref(CLOSE,-9),14,percent)+ROC(Ref(CLOSE,-9),11,percent))/2

Coppock Curve - Signal Formulas

Enter Long:

Fml("Coppock Curve - CCT") > Ref(Fml("Coppock Curve - CCT"), -1) AND
((Close > Ref(Open,-1) AND Ref(Black(),-1)) OR
(Close > Ref(Close,-1) AND Ref(White(),-1)))

Close Long:

Fml("Coppock Curve - CCT") < Ref(Fml("Coppock Curve - CCT"),-1) AND
((Close < Ref(Open,-1) AND Ref(White(),-1)) OR
(Close < Ref(Close,-1) AND Ref(Black(),-1)))

Enter Short:

Fml("Coppock Curve - CCT") < Ref(Fml("Coppock Curve - CCT"),-1) AND
((Close < Ref(Close,-1) AND Ref(Black(),-1)) OR
(Close < Ref(Open,-1) AND Ref(White(),-1)))

Close Short:

Fml("Coppock Curve - CCT") > Ref(Fml("Coppock Curve - CCT"),-1) AND
((Close > Ref(Close,-1) AND Ref(White(),-1)) OR
(Close > Ref(Open,-1) AND Ref(Black(),-1)))

Crude Oil Seasonal Trade #2

Enter Long:

Month()=8 AND H>=HHV(Ref(H,-1),5)+1

Close Long:

```
bc:=Month()=8 AND H>=HHV(Ref(H,-1),5)+1;
sc:=L<=LLV(Ref(L,-1),3)-1;
trade:=If(bc,1,If(sc,0,PREV));
sc OR

If(ValueWhen(1,Cross(trade,.5),H)< LLV(Ref(L,-1),8)-1,L<= LLV(Ref(L,-1),8)-1,0)
OR (Month()=9 AND DayOfMonth()>=26)
OR Month()=10
```

Cyclical System by Jeffrey Owen Katz
{Notes: February 1999 - TASC-article (see also TRADERS' TIPS)}

Enter Long:

```
thresh:= {omit whipsaw} 4;
k:= {roc comparison period} 3;
m:= {cycle period} 63;
hld:= {maximum period holding position} 10;
Value1:= {volatility}
Stdev(Mov(C,m,S)-Mov(C,m+k,S),20);
Value2:= {roc, relative comparison ratio}
Mov(C,m,S)-Mov(C,m+k,S);
tv1:= thresh*Value1;
Value2>tv1
```

Close Long:

```
thresh:= {omit whipsaw} 4;
k:= {roc comparison period} 3;
m:= {cycle period} 63;
hld:= {maximum period holding position} 10;
Value1:= {volatility}
Stdev(Mov(C,m,S)-Mov(C,m+k,S),20);
Value2:= {roc, relative comparison ratio}
Mov(C,m,S)-Mov(C,m+k,S);
tv1:= thresh*Value1;
Ref(Cross(Value2,tv1),-hld)
```

Enter Short:

```
thresh:= {omit whipsaw} 4;
k:= {roc comparison period} 3;
m:= {cycle period} 63;
hld:= {maximum period holding position} 10;
Value1:= {volatility}
Stdev(Mov(C,m,S)-Mov(C,m+k,S),20);
Value2:= {roc, relative comparison ratio}
Mov(C,m,S)-Mov(C,m+k,S);
```

```
tv1:= thresh*Value1;
Value2<tv1
```

Close Short:

```
thresh:= {omit whipsaw} 4;
k:= {roc comparison period} 3;
m:= {cycle period} 63;
hld:= {maximum period holding position} 10;
Value1:= {volatility}
Stdev(Mov(C,m,S)-Mov(C,m+k,S),20);
Value2:= {roc, relative comparison ratio}
Mov(C,m,S)-Mov(C,m+k,S);
tv1:= thresh*Value1;
Ref(Cross(tv1,Value2),-hld)
```

Displaced Moving Average

Buy:

```
Cross(C,Ref(Mov(C,50,e),-15)) {uses 50ema displaced by 15 days}
```

Sell:

```
Cross(Ref(Mov(C,50,e),-15),C)
```

Dynamic Break-out System (DBS) by George Pruitt
DBS-LookBack

```
X:=Stdev(C,30);
Y:=Ref(X,-1);
Z:=1+((X-Y)/X);
If(Cum(1)=1,20,Min(Max(PREV*Z,20),60));
```

DBS-BuyBreak

```
HHV(H,LastValue( Fml( "DBS-LookBack" ) + PREV - PREV))
```

DBS-BuyExit

```
LLV(L,LastValue( Fml( "DBS-LookBack" ) / 2 + PREV - PREV))
```

DBS-SellBreak

```
LLV(L,LastValue( Fml( "DBS-LookBack" ) + PREV - PREV))
```

DBS-SellExit

```
HHV(H,LastValue( Fml( "DBS-LookBack" ) / 2 + PREV - PREV))
```

DBS-BreakWhere

```
TopB:=Ref( Fml( "DBS-BuyBreak" ),-1);
LowB:=Ref( Fml( "DBS-SellBreak" ),-1);
((O+H+L+C)/4-LowB)*100/(TopB-LowB);
```

Dynamic Break-out System (DBS)

Enter Long:

```
H>Ref( Fml( "DBS-BuyBreak" ),-1)
```

Close Long:

```
L<Ref( Fml( "DBS-BuyExit" ),-1)
```

Enter Short:

```
L<Ref( Fml( "DBS-SellBreak" ),-1)
```

Close Short:

```
H>Ref( Fml( "DBS-SellExit" ),-1)
```

Entry Condition

Long

```
SETUP:=L=LLV(L,18);
LONGTRIGGER:=H>=(ValueWhen(1,SETUP=1,HIGH)+0.7*(ATR(50)));
LONGTRIGGER=1
```

{to już ja dopisałem, ale tylko po to by zrobić z tego system w "obie strony"}

Short

```
SETUP:=H=HHV(H,18);
SHORTRIGGER:=L>=(ValueWhen(1,SETUP=1,Low)-0.7*(ATR(50)));
SHORTRIGGER =1
```

{to już ja dopisałem, ale tylko po to by zrobić z tego system w "obie strony"}

Exit a Long Position

```
ExitPrice:= If(Close >= High-0.25*(High-Low), Low-AFewTicks, PREV);
Low <= ExitPrice
```

Exit on Close

Open Long (to moje - jako uzupełnienie formuły)

```
x:=hour();
y:=minute();
```

x=9 and
y=10

Close Long

x:=hour();
y:=minute();
x=16 and
y=10
Short

Experimental Williams Trading System

Chaos Blue BL

Ref(Wilders(MP(),13),-8);
{Alligator Blue Balance Line - Jaw} {13 bar smoothed average offset 8 bars}

Chaos Green BL

Ref(Wilders(MP(),5),-3);
{Alligator Green Balance Line - Lip} {5 bar smoothed average offset 3 bars}

Experimental Williams Trading System

Enter Long:

Cross(C,Fml("Chaos Green BL")) AND Fml("Chaos Green BL") > Fml("Chaos Blue BL")

Close Long:

Cross(Fml("Chaos Green BL"),C) AND Fml("Chaos Blue BL") > Fml("Chaos Green BL")

FibFO II

(ForecastOsc(C,3)+ForecastOsc(C,5)+ForecastOsc(C,8))/3

FibFO Optimizer

Enter Long/Close Short:

Cross(opt1,Fml("FibFO II"))

Enter Short/Close Long:

Cross(Fml("FibFO II"),opt2)

Opt1 min -4 max 4 step 0.1
Opt2 min -4 max 4 step 0.1

Forecast Oscillator System Alternative

Enter long:

Cross(ForecastOsc(C,21),Mov(ForecastOsc(C,21),3,E)) AND Cross(ForecastOsc(C,21),0)

Exit long:

Cross(Mov(ForecastOsc(C,21),3,E),ForecastOsc(C,21)) AND Cross(6,ForecastOsc(C,21))

Forecast Oscillator Trading System

Enter Long:

Cross(opt1,ForecastOsc(CLOSE,opt3))

Close Long:

Cross(ForecastOsc(CLOSE,opt3),opt2)

Enter Short:

Cross(ForecastOsc(CLOSE,opt3),opt2)

Close Short:

Cross(opt1,ForecastOsc(CLOSE,opt3))

Gap1 System

```
{BUY}
L>Ref(H,-1) OR Cum(1)=LastValue(Cum(1))
{SELL}
H<Ref(L,-1) OR Cum(1)=LastValue(Cum(1))
```

Gap2 System

```
{BUY}
N1:=5;
L>Ref(HHV(H,N1),-1) OR Cum(1)=LastValue(Cum(1))
{SELL}
N1:=5;
H<Ref(LLV(L,N1),-1) OR Cum(1)=LastValue(Cum(1))
```

Gap3 System

Enter Long
N1:=5;
L>Ref(HHV(H,N1),-1) OR Cum(1)=LastValue(Cum(1))

Exit Long
N2:=3;
C<Ref(LLV(L,N2),-1) OR Cum(1)=LastValue(Cum(1))

Enter Short
N1:=5;
H<Ref(LLV(L,N1),-1) OR Cum(1)=LastValue(Cum(1))

Exit Short
N2:=3;
C>Ref(HHV(H,N2),-1) OR Cum(1)=LastValue(Cum(1))

Gap Up System With Delayed Exit

Enter long:

GapUp()

Close long:

Ref(GapUp(),-5)

Initial equity 10000
Positions Long and short
Trade price Open
Trade delay 1
Entry commission 0%
Exit commission 0%
Interest rate 0%
Margin req. 100%

Genesis of a Simple Futures Trading system

Enter Long:
Cross(Mov(Close,9,S), Mov(Close,50,S)) And Close > Mov(Close,80,S)

Close Long:
Cross(Mov(Close,50,S), Mov(Close,9,S)) And Close > Mov(Close,80,S)

Enter Short:
Cross(Mov(Close,50,S), Mov(Close,9,S)) And Close < Mov(Close,80,S)

Close Short:
Cross(Mov(Close,9,S), Mov(Close,50,S)) And Close < Mov(Close,80,S)

Gil Raff MarketSpace Timing System – Weekly Data

Primary Buy Signal

```
((MACD()>Mov(MACD(),9,E) AND
C>Mov(C,5,E) AND
C>Mov(C,15,E))=TRUE) AND
(Ref(MACD()>Mov(MACD(),9,E) AND
C>Mov(C,5,E) AND
C>Mov(C,15,E),-1)=FALSE) AND
BarsSince(Ref( ((MACD()>Mov(MACD(),9,E) AND
C>Mov(C,5,E) AND
C>Mov(C,15,E))=TRUE) AND
(Ref(MACD()>Mov(MACD(),9,E) AND
C>Mov(C,5,E) AND
C>Mov(C,15,E),-1)=FALSE),-1))
>=
BarsSince(Ref(Cross(0.955*Ref(C,-2),C),-1))
```

Primary Sell Signal

```
Cross(0.955*Ref(C,-2),C) AND
BarsSince(((MACD()>Mov(MACD(),9,E) AND
C>Mov(C,5,E) AND
C>Mov(C,15,E))=TRUE) AND
(Ref(MACD()>Mov(MACD(),9,E) AND
C>Mov(C,5,E)AND
C>Mov(C,15,E),-1)=FALSE))
<=
BarsSince(Ref(Cross(0.955*Ref(C,-2),C),-1))
```

Gil Raff MarketSpace Timing System - Daily Data

Primary Buy Signal

```
((MACD()>Mov(MACD(),45,E) AND
C>Mov(C,25,E))=TRUE) AND
(Ref(MACD()>Mov(MACD(),45,E) AND
C>Mov(C,25,E),-1)=FALSE) AND
BarsSince(Ref(((MACD()>Mov(MACD(),45,E) AND
C>Mov(C,25,E))=TRUE) AND
(Ref(MACD()>Mov(MACD(),45,E) AND
C>Mov(C,25,E),-1)=FALSE),-1)) >=
BarsSince(Ref(Cross(0.9*Ref(C,-7),C),-1))
```

Primary Sell Signal

```
(Cross(0.9*Ref(C,-7),C) AND
BarsSince(((MACD()>Mov(MACD(),45,E) AND
C>Mov(C,25,E))=TRUE) AND
(Ref(MACD()>Mov(MACD(),45,E) AND
C>Mov(C,25,E),-1)=FALSE))
<=
BarsSince(Ref(Cross(0.9*Ref(C,-7),C),-1)))
```

Half a line is fine Trendline System

Enter Long:

```
{n=Zig Zag indicator points}
n:=.80{pts};
aPeak:=
Zig(H,n,$)>Ref(Zig(H,n,$),-1) AND
Zig(H,n,$) >Ref(Zig(H,n,$),1{future});
bsp:=BarsSince(aPeak);
bbp:=If(bsp=0,Ref(bsp,-1)+1,bsp);
ppmp:=ValueWhen(2,bsp=0,H)-
ValueWhen(1,bsp=0,H);
ROCbp:=ValueWhen(1,bsp=0,ppmp/bbp);
PeakTrendline:=
If(Ref(bsp,-1)=1 AND aPeak=1,
ValueWhen(1,Ref(bsp,-1)=1,
Ref(H,-2))-bbp*Ref(ROCbp,-1),
If(bsp=1,
ValueWhen(1,bsp=1,Ref(H,-1))-bbp*ROCbp,
ValueWhen(1,bsp=2,Ref(H,-2))-
bbp*Ref(ROCbp,-1)));

Cross(C,PeakTrendline) AND
PeakTrendline<=Ref(PeakTrendline,-1)
AND
{peak locked-in.}
Ref(LowestSince(1,aPeak=1,H),-1)<=
Ref(ValueWhen(1,aPeak=1,H),-1)-n;
```

Enter Short:

```
{n=points}
n:=.80{pts};
aTrough:=
Zig(L,n,$)<Ref(Zig(L,n,$),-1) AND
Zig(L,n,$)<Ref(Zig(L,n,$),1{future});
bst:=BarsSince(aTrough);
bbt:=
If(bst=0,Ref(bst,-1)+1,bst);
ptmt:=ValueWhen(2,bst=0,L)-ValueWhen(1,bst=0,L);
ROCbt:=ValueWhen(1,bst=0,ptmt/bbt);
TroughTrendline:=
If(Ref(bst,-1)=1 AND aTrough=1{true},
ValueWhen(1,Ref(bst,-1)=1,
Ref(L,-2))-bst*Ref(ROCbt,-1),
If(bst=1,ValueWhen(1,bst=1,Ref(L,-1))-bst*
ROCbt,ValueWhen(1,bst=2,Ref(L,-2))-bbt*
Ref(ROCbt,-1)));

Cross( TroughTrendline,C) AND
TroughTrendline>=Ref(TroughTrendline,-1)
AND
{trough locked-in}
Ref(HighestSince(1,aTrough=1,L),-1)>=
```

Ref(ValueWhen(1,aTrough=1,L),-1)+n;

Historical Volatility Trading System

Enter Long:
Cross(CLOSE,Mov(C,20,E)) AND Alert(Fml("Historical Volatility Indicator")<=5,10)

Enter Short:
Cross(Mov(C,20,E),CLOSE) AND Alert(Fml("Historical VolatilityIndicator")<=5,10)

Key Reversals System

Enter Long:
L < Ref(L,-1) AND C>Ref(C,-1) AND C < H

Close Long:
H >=Ref(H,-1)

STOPS

Maximum Loss: LONG ONLY
2.0 Percent

JKL System

E Long:

Sum(Stdev((C+O)/2,opt2) * (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2), opt2) - Mov(Sum(Stdev((C+O)/2,opt2) * (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2), opt2), opt3,SIMPLE)> opt1

C Long:

Sum(Stdev((C+O)/2,opt2) * (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2),opt2) - Mov(Sum(Stdev((C+O)/2,opt2) * (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2),opt2), opt3,SIMPLE)< opt1

E Short:

Sum(Stdev((C+O)/2,opt2) * (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2), opt2)-Mov(Sum(Stdev((C+O)/2,opt2) * (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2), opt2),opt3,SIMPLE)< opt1

C Short:

Sum(Stdev((C+O)/2,opt2) * (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2), opt2)-Mov(Sum(Stdev((C+O)/2,opt2)* (C+O)/2,opt2) /
Sum(Stdev((C+O)/2,opt2), opt2),opt3,SIMPLE)> opt1

Optimization:

Name: OPT1

Description: punkt zmiany 1
Minimum: -15
Maximum: 15
Step: 1

Name: OPT2
Description: okres kótki
Minimum: 3
Maximum: 10
Step: 1

Name: OPT3
Description: okres długi
Minimum: 10
Maximum: 20
Step: 1

J2L Trading System

Enter Long :

Cross(TSF(CLOSE,opt1) ,LinearReg(CLOSE,opt1))

Close Long :

Cross(opt2,TSF(CLOSE,opt1) - LinearReg(CLOSE,opt1))

Optimise :
Opt1 : 5 to 100 step 1
Opt2 : 0 to 0.05 step 0.1

Linear Regression Trading System
Enter Long:

Cross(opt2,ForecastOsc(O,opt1))

Close Long;

Cross(ForecastOsc(O,opt1),opt3) OR Cross(Mov(Stoch(opt4,3),opt5,S),Stoch(opt4,3))

MACD Crossover System Test

Enter Long:

Mov(C,5,E) > Mov(C,13,E) AND Mov(C,13,E) > Mov(C,40,E)

Close Long:

Cross(Mov(C,13,E),Mov(C,5,E))

MACDhistogram

Enter Long :

MACDhistogram:=MACD()-Mov(MACD(),9,E);

Ref(MACDhistogram,-1)>0 AND Ref(Stoch(5,3),-1)<80

Enter Short :

MACDhistogram:=MACD()-Mov(MACD(),9,E);
Ref(MACDhistogram,-1)<0 AND Ref(Stoch(5,3),-1)>20

Options:

Testing -> "Trade Price" -> "Entry Price" & "Exit Price" = "Open"
"Delay" -> 0
"Positions" = "Both"
"Commissions" -> "Points $" -> "Entry" = 0 , "Exit" = 4
"Equity" -> "Points Only Test"

MACD Difference

Enter Long:

Fml("MACD Difference") 0

Close Long:

Fml("MACD Difference") <= 0

Maximum Profit System I

enter long

When(Ref(Mov(C,opt1,E),opt2)>Mov(C,opt3,E))

enter short

When(Ref(Mov(C,opt1,E),opt2)<Mov(C,opt3,E))

Maximum Profit System II

Enter Long:

(C < Ref(C, -1) AND C < Ref(C, 1)) OR
(C = Ref(C, -1) AND
 C < Ref(C, -2) AND C < Ref(C, 1))

Enter Short:

(C > Ref(C, -1) AND C > Ref(C, 1)) OR
(C = Ref(C, -1) AND
 C > Ref(C, -2) AND C > Ref(C, 1))

MetaStock System Test 01 - R2, S/C, MFI (Vol Required)

Tema S/C

```
Periods := Input("Enter Periods",1,233,34);
Tema(10000*LinRegSlope(C,Periods)/C,Periods)
```

Tema MFI

```
Periods := Input("Enter Tema Smoothing Periods",13,55,55);
Tema(MFI(Periods),Periods) – 50
```

MetaStock System Test 01 R2,S/C,MFI (VolRequired)

Enter Long :

```
Alert(RSquared(C,21) < 0.15,13) AND
Tema(10000*LinRegSlope(C,34)/C,34) > opt1 AND
HHV(Tema(10000*LinRegSlope(C,34)/C,34),5) =
HHV(Tema(10000*LinRegSlope(C,34)/C,34),13) AND
HHV(Tema(MFI(55),55),5) = HHV(Tema(MFI(55),55),13)
```

Close Long :

```
Tema(MFI(55),55) - 50 < 0 AND
Tema(10000*LinRegSlope(C,34)/C,34) < opt1 AND
LLV(Tema(10000*LinRegSlope(C,34)/C,34),5) =
LLV(Tema(10000*LinRegSlope(C,34)/C,34),13) AND
LLV(Tema(MFI(55),55),5) = LLV(Tema(MFI(55),55),1)
```

Enter Short :

```
Alert(RSquared(C,21) < 0.15,13) AND
Tema(10000*LinRegSlope(C,34)/C,34) < opt2 AND
LLV(Tema(10000*LinRegSlope(C,34)/C,34),5) =
LLV(Tema(10000*LinRegSlope(C,34)/C,34),13) AND
LLV(Tema(MFI(55),55),5) = LLV(Tema(MFI(55),55),13) AND
Tema(MFI(55),55) - 50 < 0 AND
LLV(Mov(C,55,VAR),5) = LLV(Mov(C,55,VAR),13)
```

Close Short :

```
HHV(Mov(C,55,VAR),5) = HHV(Mov(C,55,VAR),13) AND
Tema(MFI(55),55) - 50 > 0
```

OPTIMIZATION:

OPT1: Min=-34 Max=-8 Step=13
OPT2: Min=-55 Max=-21 Step=34

MetaStock System Test 02 - Tema Binary Wave, Qstick

BW2 Demand Index

```
If(Tema(DI(),21) > 5,+1,If(Tema(DI(),21) < -13,-1,0))
```

BW3 Linear Regression Slope

```
If(Tema(10000*LinRegSlope(C,34)/C,34) > 5,+1,
If(Tema(10000*LinRegSlope(C,34)/C,34) < -13,-1,0)) BW4 CCI
```

BW4 CCI

```
If(Tema(CCI(21),21) > 5,+1, If(Tema(CCI(21),21) < -13,- 1,0))
```

BW5 ROC

```
If(Tema(ROC(C,21,%),21) > 2,+1,If(Tema(ROC(C,21,%),21) < -2,-1,0))
```

BW6 Money Flow

```
If(Tema(MFI(21),21)-50 > 5,+1,If(Tema(MFI(21),21)-50 < -5,-1,0))
```

BW7 CMO

```
If(Tema(CMO(C,21),21) > 5,+1,If(Tema(CMO(C,21),21) < -5,-1,0))
```

BW8 VAR ma

```
If(Mov(C,21,VAR) > Mov(C,55,VAR) AND HHV(Mov(C,233,VAR),5) =
HHV(Mov(C,233,VAR),13),+1,If(Mov(C,21,VAR) <
Mov(C,55,VAR) AND LLV(Mov(C,233,VAR),5) =
LLV(Mov(C,233,VAR),13),-1,0))
```

BW Add

```
Fml("BW2") + Fml("BW3") + Fml("BW4") + Fml("BW5") +
Fml("BW6") + Fml("BW7") + Fml("BW8")
```

BW Amplifier

```
If(RSquared(C,21) > 0.8,5,If(RSquared(C,21) >
0.6,3,If(RSquared(C,21) > 0.4,2, If(RSquared(C,21)>0.2,1,0.5))))
```

Tema Binary Wave Composite

```
Periods := Input("Enter Tema Smoothing Periods",8,233,21);
Tema(Fml("BW Add")*Fml("BW Amplifier"),Periods)
```

MetaStock System Test 02 - Tema Binary Wave Composite, QStick

Enter Long :

```
Alert(Cross(Fml("Tema Binary Wave Comp"),
Mov(Fml("Tema Binary Wave Comp"),8,S)),21) AND
HHV(Tema(Qstick(34),34),5) = HHV(Tema(Qstick(34),34),13) AND
Mov(H,21,VAR) > Mov(H,55,VAR)
```

MetaStock System Test 03 - Tema PDI - MDI, ADX (Vol Req.)

Tema PDI - MDI

```
Periods := Input("Enter Tema Smoothing Periods",8,55,13);
Tema(PDI(13) - MDI(13),Periods)
```

MetaStock System Test 03 - Tema PDI - MDI, ADX (Vol Required)

Open Long :

```
Alert(Cross(Fml("Tema PDI - MDI"),opt1),13) AND
MDI(13) - ADX(13) <= 4 AND
MDI(13) - ADX(13) >= -2 AND
ADX(13) >= 8 AND
ADX(13) <= 21
```

Close Long :

```
Fml("Tema PDI - MDI") < opt1 AND
MDI(13) > 21 AND
LLV(Mov(L,55,VAR),5) = LLV(Mov(L,55,VAR),13)
```

Open Short :

```
Alert(Cross(opt2,Fml("Tema PDI - MDI")),8) AND
ADX(13) > 34
```

Close Short :
```
Fml("Tema PDI - MDI") > 13
```

Optimization :

Opt1: Min = -1 Max = -5 Step = 2
Opt2: Min = -21 Max = -5 Step = 8

MetaStock System Test 04 - Tema PV Bin. W., StochRSI_21

PVBW01 (Highs & Lows)

```
If(HHV(L,8) = HHV(L,21),2,0) + If(HHV(L,21) = HHV(L,55),2,0) +
If(HHV(L,55) = HHV(L,233),1,0) + If(HHV(H,8) = HHV(H,21),2,0) +
If(HHV(H,21) = HHV(H,55),2,0) + If(HHV(H,55) = HHV(H,233),1,0) +
If(LLV(H,8) = LLV(H,21),-2,0) + If(LLV(H,21) = LLV(H,55),-2,0) +
If(LLV(H,55) = LLV(H,233),-1,0) + If(LLV(L,8) = LLV(L,21),-2,0) +
If(LLV(L,21) = LLV(L,55),-2,0) + If(LLV(L,55) = LLV(L,233),-1,0)
```

PVBW02 (High Vol Move)

```
If(Mov(V,3,S) > 1.02*Mov(V,21,S),1,0) * If(C > Ref(H,-1),2,0) +
If(Mov(V,2,S) > 1.02*Mov(V,21,S),1,0) * If(C < Ref(L,-1),-2,0)
```

PVBW03 (New 233 Day High or Low)

```
((If(Mov(V,2,S) > 1.02*Mov(V,21,S),1,0)) * If((H = HHV(H,233)),3,0)) +
((If(Mov(V,2,S) > 1.02*Mov(V,21,S),1,0)) * If((L = LLV(L,233)),-3,0))
```

PVBW04 (Price Look Back)

```
(2*(C-Ref(C,-21)) + 2*(C-Ref(C,-55)) + (C-Ref(C,-233)))/C
```

PVBW Add

Fml("PVBW01") + Fml("PVBW02") + Fml("PVBW03") + Fml("PVBW04")

Tema PV Binary Wave

Periods := Input("Enter Tema Smoothing Periods",8,55,21);
Tema(Fml("PVBW Add"),Periods)

MS System Test 04 - Tema PV Binary Wave

Enter Long :

Cross(Fml("Tema PV Binary Wave"),0)

Enter Short :

Cross(0,Fml("Tema PV Binary Wave"))

MS System Test 04 - Tema PV Bin W, StochRSI_21

Enter Long :

(Cross(Fml("Tema PV Binary Wave"),opt1) AND Fml("Tema StochRSI_21") > 0) OR
(Cross(Fml("Tema StochRSI_21"),0) AND Fml("Tema PV Binary Wave") > 0)

Close Long :

Fml("Tema PV Binary Wave") < -opt1 AND Fml("Tema StochRSI_21") < 0

Enter Short :

Fml("Tema PV Binary Wave") < opt2 AND Fml("Tema StochRSI_21") < 0.1*opt2

Close Short :

Fml("Tema PV Binary Wave") > 0 AND Fml("Tema StochRSI_21") > 0

Optimization :

Opt1: Min = -5, Max = +5, Step = +5
Opt2: Min = -8, Max = -2, Step = +3

Tema StochRSI_21

Periods := Input("Enter Periods",5,233,21);
Tema(((RSI(Periods) - LLV(RSI(Periods),Periods)) /
((HHV(RSI(Periods),Periods)) - LLV(RSI(Periods),Periods))) - 0.5,periods)

MetaStock System Test 05 - Tema StochRSI_13 & 55
StochRSI

((RSI(14)-LLV(RSI(14),14))/((HHV(RSI(14),14))-LLV(RSI(14),14)))

Tema StochRSI_13

Periods := Input("Enter Tema Smoothing Periods",5,233,13);
Tema(((RSI(Periods) - LLV(RSI(Periods),Periods)) /
((0.0001 + HHV(RSI(Periods),Periods)) - LLV(RSI(Periods),Periods))) -0.5,Periods)

Tema StochRSI_55

Periods := Input("Enter Tema Smoothing Periods",5,233,55);
Tema(((RSI(Periods) - LLV(RSI(Periods),Periods)) /
((0.0001+HHV(RSI(Periods),Periods)) - LLV(RSI(Periods),Periods))) -0.5,Periods)

MetaStock System Test 05 - Tema StochRSI_13 & 55

Open Long :

(Alert(Cross(Fml("Tema StochRSI_13"),opt1),21) AND
Fml("Tema StochRSI_55") < 0 AND Mov(C,21,VAR) > Ref(Mov(C,21,VAR),-8)) OR
Alert(Cross(Fml("Tema StochRSI_55"),opt1),13) AND
Fml("Tema StochRSI_13") > 0

Open Short :

Alert(Cross(opt2,Fml("Tema StochRSI_55")),13) AND
Mov(C,21,VAR) < Ref(Mov(C,21,VAR),-8)

The optimization valiues are:

opt1: Min = -0.3 Max = 0 Step = 0.1
opt2: Min = -0.3 Max = 0 Step = 0.1

Miesal Indicator System Test
Miesal Indicator

Sum(If(C > Ref(C,-1), +1, If(C < Ref(C,-1),-1, 0)),10)

CCIF-P

{formula for CCI Fibonacci Peak}
(CCI(8)+CCI(13)+CCI(21))/3

Miesal Indicator System Test

Buy:

Fml("CCIF-P")>Ref(Fml("CCIF-P"),-1) AND
Cross(Fml("CCIF-P"),-100) OR Cross(Fml("CCIF-P"),100)

Sell:

Fml("CCIF-P")<Ref(Fml("CCIF-P"),-1) AND

Cross(100,Fml("CCIF-P")) OR Cross(-100,Fml("CCIF-P"))
{horizontal lines @ -100 & +100}

Moving Average of Relative Strength System

Enter Long:

Cross(Mov(RSI(14),10,E),Mov(RSI(14),30,E))

Enter Short:

Cross(Mov(RSI(14),30,E),Mov(RSI(14),10,E))

No Name 1

Enter Long:

C> Ref(H,-1) AND C> Mov(C-1,5,S) AND Stoch(5,3)>Ref(Stoch(5,3),-1)

Close Long:

HIGH1:=HighestSince(1,C>Ref(H,-1) AND C> Mov(C-1,5,S) AND
Stoch(5,3)>Ref(Stoch(5,3),-1),H);
C<ValueWhen(1,HIGH1,L)

O! Inercja i jej średnia OPT

Enter long:

Inertia(opt1 ,opt2) > Mov(Inertia(opt1 ,opt2) ,opt3,E)

Close long:

Inertia(opt1 ,opt2) < Mov(Inertia(opt1 ,opt2) ,opt3,E)

Enter short:

Inertia(opt1 ,opt2) < Mov(Inertia(opt1 ,opt2) ,opt3,E)

Close short:

Inertia(opt1 ,opt2) > Mov(Inertia(opt1 ,opt2) ,opt3,E)

Oddball S&P System by Mark Brown

RAI - Rate of change in Advancing Issues

xyz:=Input("Time Periods",1,100,14);

```
(
 Security("X.WSE-A",C) /
  Ref(Security("X.WSE-A",C),-xyz)
   -1
  ) *  100
```

Oddball S&P System

Enter Long / Close Short

Fml("RAI - Rate of change in Advancing Issues") > 50 (OPT?)

Enter Short / Close Long

Fml("RAI - Rate of change in Advancing Issues") < -10 (OPT?)

Onno's Binary Wave System Test

enter long/close short

FmlVar("Onno's Binary Wave Indicator","long")= -1

close long/enter short

FmlVar("Onno's Binary Wave Indicator","long")= +1

Onno's Binary Wave Indicator

```
long:=If(RSI(14)<30 OR Mo(12)<90,1,
If(RSI(14)>70 OR Mo(12)>110,-1,PREVIOUS));
long;SHORTRIGGER =1
```

Pathfinder Trading System

Enter Long:

```
Mov(C,6,S) > Ref(Mov(C,6,S),-1) AND
Mov(P,3,S) > Mov(P,25,S) AND
Alert(Cross(Mov(C,9,S),Mov(C,18,S)),10)
```

Close Long:

```
Cross(Mov(C,18,S),Mov(C,9,S))
```

Enter Short:

```
Mov(C,6,S) < Ref(Mov(C,6,S),-1) AND
Mov(P,3,S) < Mov(P,25,S) AND
```

Alert(Cross(Mov(C,18,S),Mov(C,9,S)),10)

Close Short:

Cross(Mov(C,9,S),Mov(C,18,S))

Maximum Loss Stop:
Long and short positions
Maximum loss of 0.016 points.

Initial equity: Points only
Positions: Long and short
Trade Price: Open
Trade delay: 1

PLdot H-L Price's

Open Long:

Cross(c,mov(h,opt1,s))

Close Long:

Cross(mov(l,opt2,s),c)

Open Short:

Cross(mov(l,opt2,s),c)

Close Short:

Cross(c,mov(h,opt1,s))

PLdot MP Price's

Open Long:

Cross(c,mov(mp(),opt1,s))

Close Long:

Cross(mov(mp(),opt2,s),c)

Open Short:

Cross(mov(mp(),opt2,s),c)

Close Short:

Cross(c,mov(mp(),opt1,s))

Point of Balance

Bull and Bear Fear System Test

Enter Long:

```
n := 12 {Time periods};
BullFear := (HHV(HIGH,n) - LLV(HIGH,n))/2 + LLV(HIGH,n);
Cross(CLOSE,BullFear)
```

Enter Short:

```
n := 12 {Time periods};
BearFear := (HHV(LOW,n) - LLV(LOW,n))/2 + LLV(LOW,n);
Cross(BearFear,CLOSE)
```

Przecięcie Średnich System

E Long = C Short

Mov(C,opt1,W) > Mov(C,opt2,W)

E Short = C Long

Mov(C,opt1,W) < Mov(C,opt2,W)

Name: OPT1
Minimum: 3
Maximum: 18
Step: 3

Name: OPT2
Minimum: 21
Maximum: 60
Step: 3

Stops: Max Loss
Positions: Longs, Shorts
Method: Percent
Maximum Loss: OPT3
Optimization: min. 1 max. 10 step 1

Psychological Index

{Futures Magazine, Vol.29 No.6, June 2000, P.48}
LookBack:= Input("Number of lookback periods", 2, 100, 12);
UThreshold:= Input("Upper threshold (%)", 0, 100, 75);
LThreshold:= Input("Lower threshold (%)", 0, 100, 25);
UpDay:= If(CLOSE > Ref(CLOSE,-1), 1, 0);
PsychIndex:= Sum(UpDay,LookBack) / LookBack * 100;
PsychIndex;
UThreshold;
Lthreshold

Psychological Index System

Enter Long / Close Short

LookBack:= opt1;
UThreshold:= opt2;
LThreshold:= opt3;
UpDay:= If(CLOSE > Ref(CLOSE,-1), 1, 0);
PsychIndex:= Sum(UpDay,LookBack) / LookBack * 100;
PsychIndex <= LThreshold

Enter Short / Close Long

LookBack:= opt1;
UThreshold:= opt2;
LThreshold:= opt3;
UpDay:= If(CLOSE > Ref(CLOSE,-1), 1, 0);
PsychIndex:= Sum(UpDay,LookBack) / LookBack * 100;
PsychIndex >= UThreshold

OPT 1 : min 1, max 25, step 1
OPT 2 : min 1, max 15, step 1
OPT 3 : min 1, max 15, step 1

Random Entry Generator for Systems Testing

ENTER LONG

Mod(Volume,23)=0
{will open a long position if the volume is an even number Please note, if you have large volumes (x100) then you'll need to substitute Volume/10000 or some other appropriate denominator to get rid of the zeros}

EXIT LONG

{Enter your exit for testing}

{na wykresie jest c < ref(c,-1)}

ENTER SHORT

Mod(Volume,31)=1
{Same note as above}

EXIT SHORT

{Enter your exit for testing}
{na wykresie jest c > ref(c,-1)}

Recursive Moving Trend Average System Test

Buy Long:

```
Lb:=opt1;
ent:=3;
Alpha:=2/(LB+1);
Bot:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+C;
RMTA:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+(Alpha*Abs(C+Bot-Ref(Bot,-1)));
TOSC:=RMTA-Mov(C,lb,E);
Cross(tosc,(0-Abs(ent)))
```

Sell short:

```
Lb:=opt1;
ent:=3;
Alpha:=2/(LB+1);
Bot:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+C;
RMTA:=(1-Alpha)*(If(Cum(1)<Lb,C,PREV))+(Alpha*Abs(C+Bot-Ref(Bot,-1)));
TOSC:=RMTA-Mov(C,lb,E);
Cross((0+Abs(ent)),tosc)
```

Opt1 is the look- back periods, of 3 to 30

ROC Moving Average System Test

Enter long:

ROC(Mov(C,12,E),1,%)>0 AND ROC(Mov(C,60,E),1,%)>0

Exit Long:

(ROC(Mov(C,12,E),1,%)<0 AND ROC(Mov(C,60,E),1,%)>0) OR
(ROC(Mov(C,12,E),1,%)>0 AND ROC(Mov(C,60,E),1,%)<0)

Enter short:

ROC(Mov(C,12,E),1,%)<0 AND ROC(Mov(C,60,E),1,%)<0

Exit short:

(ROC(Mov(C,12,E),1,%)<0 AND ROC(Mov(C,60,E),1,%)>0) OR
(ROC(Mov(C,12,E),1,%)>0 AND ROC(Mov(C,60,E),1,%)<0)

ROC of a Moving Average System

ENTER LONG:

ROC(Mov(C,12,E),1,%)>0 AND ROC(Mov(C,60,E),1,%)>0

EXIT LONG:

(ROC(Mov(C,12,E),1,%)<0 AND ROC(Mov(C,60,E),1,%)>0)
{ OR (ROC(Mov(C,12,E),1,%)>0 AND ROC(Mov(C,60,E),1,%)<0) }

SHORT:

ROC(Mov(C,12,E),1,%)<0 AND ROC(Mov(C,60,E),1,%)<0

EXIT SHORT:

(ROC(Mov(C,12,E),1,%)<0 AND ROC(Mov(C,60,E),1,%)>0)
{ OR (ROC(Mov(C,12,E),1,%)>0 AND ROC(Mov(C,60,E),1,%)<0) }

RS System No.1

```
RelStr:=If( Typical()=0, 0, ( Typical() / Security("WIG20",Typical()) ) );
AvgRelStr:=( Mov(RelStr,5,S));
CalcRelStr:=If( (RelStr=0),0, (RelStr/AvgRelStr) );
AvgOBV:=( Mov(OBV(),5,S) );
CalcOBV:=If( (OBV()=0),0, (OBV() / AvgOBV) );
CalcStr:=(CalcRelStr * CalcOBV);
CalcStr
```

RS System No.1

enter long:
Cross(Fml("RS System No.1") , 1)

close long:
Cross(1 , Fml("RS System No.1"))

RSI(9) Divergence Buy:

If(RSI(9) >= HHV(RSI(9),19) AND CLOSE <HHV(CLOSE,19), 1,0) OR
If(CLOSE <= LLV(CLOSE,19) AND RSI(9) > LLV(RSI(9),19), 1,0)

RSI(9) Divergence Sell:

```
If(CLOSE >= HHV(CLOSE,19) AND RSI(9)<HHV(RSI(9),19),1,0) OR
If(RSI(9) <= LLV(RSI(9),19) AND CLOSE > LLV(CLOSE,19),1,0)
```

RSI / Wstęga Bollinger'a

Open Long:

```
Low<=BbandBot(c,20,s,2) and rsi(20)<30
```

Close Long:

```
high>=BbandBot(c,20,s,2) and rsi(20)>70
```

Open Short:

```
high>=BbandBot(c,20,s,2) and rsi(20)>70
```

Close Short:

```
Low<=BbandBot(c,20,s,2) and rsi(20)<30
```

SeqSETUP & SeqINTERSECTION

SeqSETUP w/Validation day

```
{BUY SETUP}
If((C < Ref(C,-4) AND
Ref(C,-1) < Ref(C,-5) AND
Ref(C,-2) < Ref(C,-6) AND
Ref(C,-3) < Ref(C,-7) AND
Ref(C,-4) < Ref(C,-8) AND
Ref(C,-5) < Ref(C,-9) AND
Ref(C,-6) < Ref(C,-10) AND
Ref(C,-7) < Ref(C,-11) AND
Ref(C,-8) < Ref(C,-12) AND
{Validation Day}
Ref(C,-9) > Ref(C,-13) ),1,0);
{SELL SETUP}
If((C > Ref(C,-4) AND
Ref(C,-1) > Ref(C,-5) AND
Ref(C,-2) > Ref(C,-6) AND
Ref(C,-3) > Ref(C,-7) AND
Ref(C,-4) > Ref(C,-8) AND
Ref(C,-5) > Ref(C,-9) AND
Ref(C,-6) > Ref(C,-10) AND
Ref(C,-7) > Ref(C,-11) AND
Ref(C,-8) > Ref(C,-12) AND
{Validation Day}
Ref(C,-9) < Ref(C,-13) ),-1,0)
```

SeqINTERSECTION

{DeMark says this is now ELECTIVE in futures and index markets}

```
L <= Ref(HHV(H,6),-3) AND L >= Ref(LLV(L,6),-3) OR
H >= Ref(LLV(L,6),-3) AND H <= Ref(HHV(H,6),-3)
```

SeqCdB/S (Countdown for Buys and Sells)

```
{plots +1 for BUYS, plots -1 for SELLS.}
If(C < Ref(L,-2),1,0) ;
If(C > Ref(H,-2),-1,0)
```

SeqSETUP,V day System Test

```
{BUY SETUP}
C < Ref(C,-4) AND
Ref(C,-1) < Ref(C,-5) AND
Ref(C,-2) < Ref(C,-6) AND
Ref(C,-3) < Ref(C,-7) AND
Ref(C,-4) < Ref(C,-8) AND
Ref(C,-5) < Ref(C,-9) AND
Ref(C,-6) < Ref(C,-10) AND
Ref(C,-7) < Ref(C,-11) AND
Ref(C,-8) < Ref(C,-12) AND
{Validation Day}
Ref(C,-9) > Ref(C,-13)


{SELL SETUP}
C > Ref(C,-4) AND
Ref(C,-1) > Ref(C,-5) AND
Ref(C,-2) > Ref(C,-6) AND
Ref(C,-3) > Ref(C,-7) AND
Ref(C,-4) > Ref(C,-8) AND
Ref(C,-5) > Ref(C,-9) AND
Ref(C,-6) > Ref(C,-10) AND
Ref(C,-7) > Ref(C,-11) AND
Ref(C,-8) > Ref(C,-12) AND
{Validation Day}
Ref(C,-9) < Ref(C,-13)
```

Simple Fut WIG 20 System by Pawel Rejczak

Enter Long:

```
C>1.01*Ref(C,-1) AND C>Mov(C,5,E)
```

Close Long:

C<Mov(C,13,E)

Enter Short:

C<0.99*Ref(C,-1) AND C<Mov(C,5,E)

Close Short:

C>Mov(C,13,E)

Stochastic Cross Trading System

Enter Long:

stoch(12,3)<36 and cross(stoch(12,3),mov(stoch(12,3),6,w))

Close Long:

stoch(12,3)>52 and cross(mov(stoch(12,3),3,w),stoch(12,3)) or mov(stoch(12,3),3,w)>55

Stochastic MA System

enter long:

mov(stoch(55,21),5,w)>ref(mov(stoch(55,21),5,w),-1) and
mov(stoch(55,21),5,w)<75 and mov(stoch(55,21),5,w)>20

exit long:

(mov(stoch(55,21),5,w)<75 and ref(mov(stoch(55,21),5,w),-1)>75)

enter short:

(mov(stoch(55,21),5,w)<70 and ref(mov(stoch(55,21),5,w),-1)>70) and
mov(stoch(55,21),5,w)<ref(mov(stoch(55,21),5,w),-1)

exit short:

mov(stoch(55,21),5,w)>ref(mov(stoch(55,21),5,w),-1) and mov(stoch(55,21),5,w)<75 and
mov(stoch(55,21),5,w)>20

Stock Rhythm System

Enter Long

thresh:= 4;

```
k:= 3;
m:= 63;
Value1:= Stdev(Ref(ROC(C,k,$),-m),20);
Value2:= Ref(ROC(C,k,$),-m);
When(Value2 > thresh*Value1)
```

Enter Short

```
thresh:= 4;
k:= 3;
m:= 63;
Value1:= Stdev(Ref(ROC(C,k,$),-m),20);
Value2:= Ref(ROC(C,k,$),-m);
When(Value2 <-thresh*Value1)
```

Stops

Inactivity
Positions - Long and Short
Method - Points
Minimum Change - 15000
Periods – 10

System Test Examples
"Buy at the open plus half the average true range of the last ten days?"

```
HIGH >= OPEN + 0.5*Ref(ATR(10), -1)
```

"If these two moving averages cross today, buy on tomorrow's open."

```
MA1:= Mov(CLOSE, 10, SIMPLE);
MA2:= Mov(CLOSE, 20, SIMPLE);
Ref(Cross(MA1, MA2), -1)
```

{with System Testing Options | Testing tab | Entry Price
set to "Open" and delay set to "zero"}
"Exit five bars after entry."

```
EntryCondition:= {your trade entry conditions};
BarsSince(EntryCondition >= 5)
```

Tether Line Trading System by Bryan Strain
Bryans Tether Line

```
( HHV(H,50) + LLV(L,50) ) / 2
```

Bryans Volume Oscillator

```
Mov(If(C>O,+V,If(C<O,-V,0)),7,S)
```

Bryans MBO Indicator

Mov(C,25,S) - Mov(C,200,S)

Tether Line Trading System

Enter Long:

C > (HHV(H,50) + LLV(L,50)) / 2 AND
Mov(If(C>O,+V,If(C<O,-V,0)),7,S) > 0 AND
(Mov(C,25,S) - Mov(C,200,S)) > 0

Close Long:

C < (HHV(H,50) + LLV(L,50)) / 2

Tema PDI - MDI

Tema PDI - MDI

Periods := Input("Enter Tema SmoothingPeriods",8,55,13);
Tema(PDI(13) - MDI(13),Periods)

Tema PDI - MDI System

Open Long:

Alert(Cross(Fml("Tema PDI - MDI"),opt1),13) AND
MDI(13) - ADX(13) <= 4 AND
MDI(13) - ADX(13) >= -2 AND
ADX(13) >= 8 AND
ADX(13) <= 21

Close Long:

Fml("Tema PDI - MDI") < opt1 AND
MDI(13) > 21 AND
LLV(Mov(L,55,VAR),5) = LLV(Mov(L,55,VAR),13)

Open Short:

Alert(Cross(opt2,Fml("Tema PDI - MDI")),8) AND
ADX(13) > 34

Close Short:

Fml("Tema PDI - MDI") > 13

Optimization:
Opt1: Min = -1 Max = -5 Step = 2
Opt2: Min = -21 Max = -5 Step = 8

Tema PV Binary Wave System
Tema PV Binary Wave System

Enter Long

Fml("Tema PV Binary Wave") > 0

Enter Short

Fml("Tema PV Binary Wave") < 0

Three Day Engulfing Bear Short Trade

Enter Short:

Engulfingbear()

{Means: today there was an engulfing bear signal, so enter trade.}

Exit Short:

Ref(EngulfingBear(), -3)

Threshold Trading Revisited - RSI Formulas

Name: RSI enter long

Ref(Cross(RSI(14), 30),-1) and H >= Ref(H, -1)+1

Name: RSI enter short

Ref(Cross(70, RSI(14)),-1) AND L <= Ref(L, -1)-1

Threshold Trading Revisited - Stochastic by Rudy Teseo
Stochastic Formulas

Name: Stochastic enter long

setup:= Mov(Stoch(5,3),3,S) < 20 AND Cross(Stoch(5,3),Mov(Stoch(5,3),3,S));
Ref(setup,-1) AND H >= Ref(H,-1)+1

Name: Stochastic enter short

setup:= Mov(Stoch(5,3),3,S) > 80 AND Cross(Mov(Stoch(5,3),3,S),Stoch(5,3));
Ref(setup,-1) AND L <= Ref(L,-1)-1

Time Series Forecast System Test

Enter long:

Cross(opt1,((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100))

Close long:

Cross(((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100),opt2)

Enter short:

Cross(((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100),opt2)

Close short:

Cross(opt1,((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100))

opt 1: -2 to 0 (with .1 step)
opt 2: zero to +2 (with .1 step)
opt 3: 2 to 8 (with 1 step)

Org. !!
opt 1: zero to -2 (with .1 step)

Trend Analysis Index System

Enter Long:

When(Ref(Mov(C,28,S),-1),=,LLV(Mov(C,28,S),4))

Close Long:

When(Fml("TAI"),<,0.4) AND When(Ref(Fml("TAI"),-1),>=,0.4)

TSF Optimised Trading System

Enter long:

Cross(opt1,((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100))

Close long:

Cross(((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100),opt2)

Enter short:

Cross(((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100),opt2)

Close short:

Cross(opt1,((CLOSE-Ref(TSF(C,opt3),-1))/CLOSE*100))

opt 1: zero to -2 (with 0.1 step)
opt 2: zero to +2 (with 0.1 step)
opt 3: 2 to 8 (with 1 step)

Ultimate Signal Generator I

Buy:

TroughBars(1,L,3)=1

Sell:

PeakBars(1,H,3)=1

Ultimate Signal Generator II

Buy:

TroughBars(1,L,3)=1 AND TroughBars(1,MACD(),29)=1

Sell:

PeakBars(1,H,3)=1 AND PeakBars(1,MACD(),29)=1

Volume Oscillator System w/Optm

Enter long

OscV(opt1,opt2,E,%)> 0 AND Ref(OscV(opt1,opt2,E,%),-1) < 0

Enter short

OscV(opt1,opt2,E,%)< 0 AND Ref(OscV(opt1,opt2,E,%),-1) > 0

Opt1 min 5 max 40 step 2
Opt2 min 5 max 40 step 2

MovAvg Asymmetric Volatility Price Bands

Enter Long:

Periods := 11;
UpperBand := BBandTop(CLOSE,Periods,S,1.7);

BuySignal1 := Sum(CLOSE > UpperBand,3) = 3;
BuySignal2 := CLOSE > UpperBand AND Ref(LOW,-1) > Ref(upperband,-1);
BuySignal3 := LOW > UpperBand AND Ref(CLOSE,-1) > Ref(upperband,-1);
BuySignal4 := CLOSE > UpperBand AND CLOSE > 1.4 * LLV(LOW,Periods + 1) AND Mov(VOLUME,3,S) > 2000 {assuming volume in 100's otherwise use200000} AND Mov(HIGH,3,S)

> UpperBand AND Mov(HIGH - LOW,3,S) > Mov(HIGH- LOW,Periods,S);

BuySignal1 OR BuySignal2 OR BuySignal3 OR BuySignal4

Close Long:

Periods := 11;
LowerBand := BBandBot(CLOSE,Periods,S,2);
SellSignal1 := Sum(CLOSE < LowerBand,3) = 3;
SellSignal2 := CLOSE < (1-.18) * HHV(HIGH,Periods + 1) AND Sum(CLOSE < LowerBand,2) = 2;
SellSignal3 := CLOSE < (1-.18) * HHV(HIGH,Periods + 1) AND HIGH < LowerBand;
SellSignal1 OR SellSignal2 OR SellSignal3

STOPS

Maximum Loss: LONG ONLY

10.00 Percent

Regression Asymmetric Volatile Price Band

Enter Long:

Periods := 21;
UpperBand := STEBandTop(CLOSE,Periods,1) ;
Sum(CLOSE > UpperBand,3) = 3 AND LinRegSlope(CLOSE,21) > 0 AND
ROC(Correl(CLOSE,Cum(1) ,21,0),2,$) >= .2

Close Long:

Periods := 21;
LowerBand := STEBandBot(CLOSE,Periods,1.5) ;
SellSignal1 := Sum(CLOSE < LowerBand,3) = 3;
SellSignal2 := CLOSE < (1-.18) * HHV(HIGH,Periods + 1) AND HIGH < LowerBand;
SellSignal1 OR SellSignal2

STOPS

Maximum Loss: LONG ONLY

10.00 Percent

Volatility Index Trading System

Enter Long

Cross(C,Ref(LLV(C,7),-1)+(Ref(ATR(7),-1)*3))

Enter Short

Cross(Ref(HHV(C,7),-1)-(Ref(ATR(7),-1)*3),C)

01_R2/Regress Slope/MFI/TSF - (Vol Rqd)

Enter Long:

Alert(RSquared(C,21) < 0.15,21) AND LinRegSlope(C,34) > opt1 AND HHV(LinRegSlope(C,34),5) =
HHV(LinRegSlope(C,34),13) AND HHV(MFI(55),5) = HHV(MFI(55),13) AND HHV(TSF(C,55),5) = HHV(TSF(C,55),13)

Close Long:

LLV(TSF(C,55),5) = LLV(TSF(C,55),13) AND LinRegSlope(C,34) < opt1

Enter Short:

Alert(RSquared(C,21) < 0.15,13) AND LinRegSlope(C,34) < opt2 AND LLV(LinRegSlope(C,34),5) = LLV(LinRegSlope(C,34),13) AND LLV(MFI(55),5) = LLV(MFI(55),13) AND LLV(TSF(C,144),5) = LLV(TSF(C,144),13)

Close Short:

HHV(TSF(C,144),5) = HHV(TSF(C,144),13)

Optimization Variables

OPT1: Min = -0.10 Max = 0.00 Step = 0.10
OPT2: Min = -0.20 Max = 0.00 Step = 0.10

STOPS ALL OFF

02_R2/Regress Slope/CMO – All Signal Formulas

Enter Long:

Alert(RSquared(C,21) < 0.15,21) AND LinRegSlope(C,34) > opt1 AND HHV(LinRegSlope(C,34),5) = HHV(LinRegSlope(C,34),13) AND CMO(C,55) > 0 AND C = HHV(C,5)

Close Long:

LinRegSlope(C,34) < opt1 AND CMO(C,55) < 0 AND C = LLV(C,5)

Enter Short:

Alert(RSquared(C,21) < 0.15,13) AND LinRegSlope(C,34) < opt2 AND LLV(LinRegSlope(C,34),5) = LLV(LinRegSlope(C,34),13) AND CMO(C,55) < 0 AND C = LLV(C,5)

Close Short:

LinRegSlope(C,34) > opt2 AND CMO(C,55) > 0 AND C = HHV(C,5)

Optimization Variables

OPT1: Min = -0.10 Max = 0.00 Step = 0.10
OPT2: Min = -0.20 Max = 0.00 Step = 0.10

STOPS ALL OFF

03_R2/Regress Slope/Qstick - (OHLC Rqd) Signal Formulas

Enter Long:

Alert(RSquared(C,21) < 0.15,21) AND LinRegSlope(C,34) > opt1 AND HHV(LinRegSlope(C,34),5) = HHV(LinRegSlope(C,34),13) AND Qstick(55) > opt1 AND HHV(Qstick(55),5) = HHV(Qstick(55),13) AND C=HHV(C,5)

Close Long:

LinRegSlope(C,34) < opt1 AND Qstick(55) < opt1 AND C = LLV(C,5)

Enter Short:

Alert(RSquared(C,21) < 0.15,13) AND LinRegSlope(C,34) < opt2 AND LLV(LinRegSlope(C,34),5) = LLV(LinRegSlope(C,34),13) AND Qstick(55) < opt2 AND LLV(Qstick(55),5) = LLV(Qstick(55),13) AND C = LLV(C,5)

Close Short:

LinRegSlope(C,34) > opt2 AND Qstick(55) > opt2 AND C = HHV(C,5)

Optimization Variables

OPT1: Min = -0.10 Max = 0.00 Step = 0.10
OPT2: Min = -0.10 Max = 0.00 Step = 0.10

STOPS ALL OFF

04_R2/Regress Slope/CCI/TSF - All Signal Formulas

Enter Long:

Alert(RSquared(C,21) < 0.15,21) AND LinRegSlope(C,34) > opt1 AND HHV(LinRegSlope(C,34),5) = HHV(LinRegSlope(C,34),13) AND HHV(CCI(55),5) = HHV(CCI(55),13) AND CCI(55) > 0 AND HHV(TSF(C,55),5) = HHV(TSF(C,55),13) AND C = HHV(C,5)

Close Long:

LLV(TSF(C,55),5) = LLV(TSF(C,55),13) AND LinRegSlope(C,34) < opt1 AND CCI(55) < 0 AND C = LLV(C,5)

Enter Short:

Alert(RSquared(C,21) < 0.15,13) AND LinRegSlope(C,34) < opt2 AND LLV(LinRegSlope(C,34),5) = LLV(LinRegSlope(C,34),13) AND LLV(CCI(55),5) = LLV(CCI(55),13) AND LLV(TSF(C,144),5) = LLV(TSF(C,144),13) AND C = LLV(C,5)

Close Short:

HHV(TSF(C,144),5) = HHV(TSF(C,144),13) AND C = HHV(C,5)

Optimization Variables

OPT1: Min = -0.10 Max = 0.00 Step = 0.10
OPT2: Min = -0.20 Max = 0.00 Step = 0.10

STOPS ALL OFF

07_Three Moving Average System

Enter Long:
HHV(Mov(C,opt1,E),5) = HHV(Mov(C,opt1,E),13) AND
HHV(Mov(C,opt2,E),5) = HHV(Mov(C,opt2,E),13) AND
HHV(Mov(C,opt3,E),5) = HHV(Mov(C,opt3,E),13)

Close Long:

LLV(Mov(C,opt1,E),5) = LLV(Mov(C,opt1,E),13) AND
LLV(Mov(C,opt2,E),5) = LLV(Mov(C,opt2,E),13)

Enter Short:

LLV(Mov(C,opt1,E),5) = LLV(Mov(C,opt1,E),13) AND
LLV(Mov(C,opt2,E),5) = LLV(Mov(C,opt2,E),13) AND
LLV(Mov(C,opt3,E),5) = LLV(Mov(C,opt3,E),13)

Close Short:

HHV(Mov(C,opt1,E),5) = HHV(Mov(C,opt1,E),13) AND
HHV(Mov(C,opt2,E),5) = HHV(Mov(C,opt2,E),13)

OPTIMIZATION VARIABLES

OPT1:
Min = 13.00 Max = 21.00 Step = 8.00

OPT2:
Min = 55.00 Max = 89.00 Step = 34.00

OPT3:
Min = 144.00 Max = 233.00 Step = 89.00

STOPS ALL OFF

08_Momentum Time & S/C

S/C

{LinRegSlope/Close}
10000*LinRegSlope(C,34)/C

Momentum Time

(HIGH - Mov(C,55,T)+(LOW - Mov(C,55,T)))/(HIGH - Mov(C,55,T)-(LOW - Mov(C,55,T)))

08_Momentum Time & S/C

Enter Long:

```
Alert(Cross(Fml("Momentum Time"),0),13) AND C > Mov(C,21,T) AND
Fml("S/C") > 0 AND  HHV(Fml("S/C"),5) = HHV(Fml("S/C"),13)
```

Close Long:

```
Fml("S/C") < opt1
```

Enter Short:

```
Alert(Cross(0,Fml("Momentum Time")),13) AND C < Mov(C,21,T) AND
Fml("S/C") < opt1 AND  LLV(Fml("S/C"),5) = LLV(Fml("S/C"),13)
```

Close Short:

```
Fml("S/C") > 0
```

Optimization Variables

OPT1:
Min = -55.00 Max = -13.00Step = 21.00

STOPS ALL OFF

1-2-3 Reversal System

Enter Long:

(Ref(C,-2) < Ref(C,-1)) AND
(Ref(C,-1) < C) AND
(Ref(Stoch(9,3),-1) < Stoch(9,3)) AND
(Mov(Stoch(9,3),3,S) < 50)

Enter Short:

(Ref(C,-2) > Ref(C,-1)) AND
(Ref(C,-1) > C) AND
(Ref(Stoch(9,3),-1) > Stoch(9,3)) AND
(Mov(Stoch(9,3),3,S) > 50)

2/20-Day EMA Breakout System by David Landry

Enter long

Alert(Cross(Sum(L > Mov(C,20,E),2) = 2,.5),10) AND
HIGH >= Peak(1,Cross(Sum(L > Mov(C,20,E),2) = 2,.5) *
HHV(H,2),1) + .001{10 ticks} AND
BarsSince(Cross(Sum(L > Mov(C,20,E),2)= 2,.5)) < BarsSince(LOW <= Mov(C,20,E))

Close long

LOW <= Mov(C,20,E)

Enter short

Alert(Cross(Sum(H < Mov(C,20,E),2) = 2,.5),10) AND
LOW <= Peak(1,Cross(Sum(H < Mov(C,20,E),2) = 2,.5) *
LLV(L,2),1) - .001{10 ticks} AND
BarsSince(Cross(Sum(H < Mov(C,20,E),2)= 2,.5)) < BarsSince(HIGH >= Mov(C,20,E))

Close short

HIGH >= Mov(C,20,E)

Initial equity Points Only
Positions Long and short
Trade price Close
Trade delay 0

"25 x 25" Bond System MetaStock

25X25 LongEntry

{Returns long trade entry price. A non-zero number if in a long trade. Anegative value if the last day of a trade. Note: Modifications to MetaStockindicators were req'd to simulate TradeStation results.

RSI: rounded to twodecimal places. ATR: Wilder's smoothing removed }

```
{Variables to avoid duplicate function calls }
PLLV2 := Ref(LLV(L,2),-1);
PLLV25 := Ref(LLV(L,25),-1);

{ Was yesterday a setup day? }
IsSetUp :=
Cum(1) > 50 AND
Ref(PDI(14),-1) > Ref(MDI(14),-1) AND
Ref(ADX(14),-1) > 20 AND
PREC(Ref(RSI(4),-1)+.005,2) < 50;

{Determine initial entry price condition}
EntryPriceCond := Ref(C,-1) + 0.5625;
{Adjust it to enter on open if open is greater}
EntryPriceCond :=
If(O > EntryPriceCond, O, EntryPriceCond);

{Return entry price, zero if no trade. }
If(PREV <= 0,
{Not in a long trade}
If(IsSetUp AND H >= EntryPriceCond,
{Trade entered today, was it stopped?}
If(L <= PLLV25 OR
L <= EntryPriceCond - 2.5,
-EntryPriceCond, {Yes}
EntryPriceCond {No}
),
{Not in trade and not entered today}
0
),
{Have been in trade for over one day. }
{Was it stopped today? }
{Note: BarsSince() gives days in trade }
If(L <= PREV - 2.5, - PREV,
If(BarsSince(PREV=0) > 24,
{More than 24 days in trade}
If(L <= PLLV2, -PREV, PREV),
{Less than 25 days in trade}
If(L <= PLLV25, -PREV,
If(Ref(C,-1) - PREV >
5*Ref(Mov(ATR(1),45,S),-1),
If(L <= PLLV2, -PREV, PREV),
PREV
)))));
```

25x25 LongExit

```
{Returns exit price if last day of long trade}

EntryPrice := Fml("25x25 LongEntry");
ExitingTrade := EntryPrice < 0;

EntryPrice := Abs(EntryPrice);

{Variables to avoid duplicate function calls }
```

```
{Lowest low of previous two days }
PLLV2 := Ref(LLV(L,2),-1);
{Lowest low of previous 25 days }
PLLV25 := Ref(LLV(L,25),-1);
TradeDays := If(EntryPrice > 0,
BarsSince(Fml("25x25 LongEntry") = 0), 0);

{ Determine type of stop(s) }
Stop1 :=
ExitingTrade AND TradeDays>24 AND L<=PLLV2;
Stop2 :=
ExitingTrade AND TradeDays>0 AND TradeDays<=24 AND L<=PLLV25;
Stop3 :=
ExitingTrade AND L <= EntryPrice - 2.5;
Stop4 :=
ExitingTrade AND Ref(C,-1) - EntryPrice > 5*Ref(Mov(ATR(1),45,S),-1) AND L <= PLLV2;

{ Determine prices for activated stops }
Stop1Price :=
If(Stop1, Min(O, PLLV2), 0);
Stop2Price :=
If(Stop2, Min(O, PLLV25), 0);
Stop3Price :=
If(Stop3, Min(O, EntryPrice - 2.5), 0);
Stop4Price :=
If(Stop4, Min(O, PLLV2), 0);

{ Assume best stop price stopped the trade }
StopPrice :=
Max(Stop1Price,Max(Stop2Price,
Max(Stop3Price,Stop4Price)));

If(ExitingTrade, StopPrice, 0);
```

EXPERT

ADX with Stochastic Signals

New Entry

```
ADX(14) > 20 AND
( Mov(C,15,S) > Mov(C,30,S)) AND
( Mov(C,5,S) > Mov(C,30,S)) AND
Stoch(5,3) < 30 AND
Ref(Stoch(5,3) ,-1) >=30
```

Bullish formula

```
ADX(14) > 20 AND
( Mov(C,15,S) > Mov(C,30,S)) AND
( Mov(C,5,S) > Mov(C,30,S))
```

Bearish formula

ADX(14) > 20 AND
(Mov(C,15,S) < Mov(C,30,S)) AND
(Mov(C,5,S) < Mov(C,30,S))

Bollinger Band's & 13 Day MA by Piotr Wąsowski

Lokalne wykupienie:

High > BbandTop(c,34,e,1.618)

Lokalne wyprzedanie:

low < BbandBot(c,34,e,1.618)

Strefa kupna:

Cross(close,mov(c,13,e)) and close > mov(c,55,e)

Strefa sprzedaży:

Cross(mov(c,13,e),close) and close < mov(c,55,e)

Bull Fear and Bear Fear Expert by Walter Downs

HIGHLIGHTS

Name: Bull Fear
Color: Blue
Condition:

n := 12 {Time periods};
BullFear := (HHV(HIGH,n) - LLV(HIGH,n))/2 + LLV(HIGH,n);
CLOSE > BullFear

Name: Bear Fear
Color: Red
Condition:

n := 12 {Time periods};
BearFear := (HHV(LOW,n) - LLV(LOW,n))/2 + LLV(LOW,n);
CLOSE < BearFear

Combining Statistical & Pattern Analysis, Shark-32
by Walter T. Down's

Click the Trends tab and enter the following formulas in the Bullish and Bearish fields.

Shark – 32

Trends:

Bullish:

```
Mov(C,5,S)>Mov(C,20,S);
```

Bearish:

```
Mov(C,5,S)<Mov(C,20,S);
```

Click the Highlights tab, choose New, and enter "3rd Bar" in the Name field. Now change the color in the Color field to Blue. Finally, enter the following formula in the Condition field, and then choose OK.

Highlights: "3rd Bar"
Color: Blue

```
Symmetry:=.28;
Apex:=(H+L)/2;
WB:=Ref(H,-2)-Ref(L,-2);
Shark:=If((H<Ref(H,-1) AND L>Ref(L,-1) AND Ref(H,-1)<Ref(H,-2) AND
Ref(L,-1)>Ref(L,-2))=1,If(Apex <= (Ref(H,-2)-(WB*Symmetry)) AND
Apex >= (Ref(L,-2)+(WB*Symmetry)) ,1,0),0);
Shark;
```

Name: "2nd Bar"
Color: Blue

```
Symmetry:=.28;
Apex:=(H+L)/2;
WB:=Ref(H,-2)-Ref(L,-2);
Shark:=If((H<Ref(H,-1) AND L>Ref(L,-1) AND Ref(H,-1)<Ref(H,-2) AND
Ref(L,-1)>Ref(L,-2))=1,If(Apex <= (Ref(H,-2)-(WB*Symmetry)) AND
Apex >= (Ref(L,-2)+(WB*Symmetry)) ,1,0),0);
Ref(Shark,+1)=1;
```

Name: "1st Bar"
Color: Blue

```
Symmetry:=.28;
Apex:=(H+L)/2;
WB:=Ref(H,-2)-Ref(L,-2);
```

```
Shark:=If((H<Ref(H,-1) AND L>Ref(L,-1) AND Ref(H,-1)<Ref(H,-2) AND
Ref(L,-1)>Ref(L,-2))=1,If(Apex <= (Ref(H,-2)-(WB*Symmetry)) AND
Apex >= (Ref(L,-2)+(WB*Symmetry)) ,1,0),0);
Ref(Shark,+2)=1;
```

Click the Symbols tab, choose New and enter "Shark Buy" in the Name field.
Now enter the following formula in the Condition field.

"Shark Buy"

```
Symmetry:=.28;
Apex:=(H+L)/2;
WB:=Ref(H,-2)-Ref(L,-2);
Shark:=If((H<Ref(H,-1) AND L>Ref(L,-1) AND Ref(H,-1)<Ref(H,-2) AND
Ref(L,-1)>Ref(L,-2))=1,If(apex <= (Ref(H,-2)-(WB*Symmetry)) AND
Apex >= (Ref(L,-2)+(WB*Symmetry)) ,1,0),0);
Buyok:=Cross(C,ValueWhen(1,Shark=1,Ref(H,-2)));
Chk:=Cum(Buyok)-ValueWhen(1,Shark=1,Cum(Buyok));
ValidChk:=Alert(Shark=1,25);
Buy:= Buyok=1 AND Ref(Chk,-1)=0 AND ValidChk=1;
Buy;
```

Symbol: Buy Arrow
Color: Green
Label: Buy

Using the Same method as above, enter the following Symbol formula.

"Shark Sell"

```
Symmetry:=.28;
Apex:=(H+L)/2;
WB:=Ref(H,-2)-Ref(L,-2);
Shark:=If((H<Ref(H,-1) AND L>Ref(L,-1) AND Ref(H,-1)<Ref(H,-2) AND
Ref(L,-1)>Ref(L,-2))=1,If(apex <= (Ref(H,-2)-(WB*Symmetry)) AND
Apex >= (Ref(L,-2)+(WB*Symmetry)) ,1,0),0);
Sellok:=Cross(ValueWhen(1,Shark=1,Ref(L,-2)),C);
Chk:=Cum(Sellok)-ValueWhen(1,Shark=1,Cum(Sellok));
ValidChk:=Alert(Shark=1,25);
Sell:= Sellok=1 AND Ref(Chk,-1)=0 AND ValidChk=1;
Sell;
```

Symbol: Sell Arrow
Color: Red
Label: Sell

DeMark's Sequential™ Trading System

Buy Indicators :

TD - SetUp-Buy

```
TD1:=If(C<Ref(C,-4),1,0);

TD2:=If(TD1=1 AND Ref(TD1,-1)=1 AND Ref(TD1,-2)=1 AND Ref(TD1,-3)=1 AND
Ref(TD1,-4)=1 AND Ref(TD1,-5)=1 AND Ref(TD1,-6)=1 AND Ref(TD1,-7)=1 AND Ref(TD1,-8)=1,
1,0);

TD3:=If(Ref(C,-9)>=Ref(C,-13),1,0);

TD4:=If(TD2=1 AND TD3=1,1,0);

TD5:=If(H>=Ref(LLV(L,5),-3),1,0);

D8:=If(Ref(TD4,1)=1 AND TD5=1,1,0);

D9:=If(TD4=1 AND TD5=1 AND Ref(D8,-1)<>1,1,0);

D10:=If(Ref(TD4,-1)=1 AND TD5=1 AND Ref(D8,-2)<>1 AND Ref(D9,-1)<>1,1,0);

D11:=If(Ref(TD4,-2)=1 AND TD5=1 AND Ref(D8,-3)<>1 AND Ref(D9,-2)<>1 AND Ref(D10,-
1)<>1,1,0);

D12:=If(Ref(TD4,-3)=1 AND TD5=1 AND Ref(D8,-4)<>1 AND Ref(D9,-3)<>1 AND
Ref(D10,-2)<>1 AND Ref(D11,-1)<>1,1,0);

D13:=If(Ref(TD4,-4)=1 AND TD5=1 AND Ref(D8,-5)<>1 AND Ref(D9,-4)<>1 AND
Ref(D10,-3)<>1 AND Ref(D11,-2)<>1 AND Ref(D12,-1)<>1,1,0);

D14:=If(Ref(TD4,-5)=1 AND TD5=1 AND Ref(D8,-6)<>1 AND Ref(D9,-5)<>1 AND
Ref(D10,-4)<>1 AND Ref(D11,-3)<>1 AND Ref(D12,-2)<>1 AND Ref(D13,-1)<>1,1,0);

D15:=If(Ref(TD4,-6)=1 AND TD5=1 AND Ref(D8,-7)<>1 AND Ref(D9,-6)<>1 AND
Ref(D10,-5)<>1 AND Ref(D11,-4)<>1 AND Ref(D12,-3)<>1 AND Ref(D13,-2)<>1 AND
Ref(D14,-1)<>1,1,0);

D16:=If(Ref(TD4,-7)=1 AND TD5=1 AND Ref(D8,-8)<>1 AND Ref(D9,-7)<>1 AND
Ref(D10,-6)<>1 AND Ref(D11,-5)<>1 AND Ref(D12,-4)<>1 AND Ref(D13,-3)<>1 AND
Ref(D14,-2)<>1 AND Ref(D15,-1)<>1,1,0);

D17:=If(Ref(TD4,-8)=1 AND TD5=1 AND Ref(D8,-9)<>1 AND Ref(D9,-8)<>1 AND
Ref(D10,-7)<>1 AND Ref(D11,-6)<>1 AND Ref(D12,-5)<>1 AND Ref(D13,-4)<>1 AND
Ref(D14,-3)<>1 AND Ref(D15,-2)<>1 AND Ref(D16,-1)<>1,1,0);

SetUp:=D8+D9+D10+D11+D12+D13+D14+D15+D16+D17;
```

SetUp

TD Count Down Buy A

```
Cum(If(C<Ref(CLOSE,-2),1,0)) - ValueWhen(1,Ref(Fml("TD - SetUp-Buy" ), 1)=1,
Cum(If(C<Ref(C,-2),1,0)))
```

TD Count Down Buy B

```
If(Fml("TD Count Down Buy A")>=14 AND C>Ref(C,-4),1,0)
```

TD Count Down Buy C

```
If(Fml("TD Count Down Buy A")>=14 AND C>Ref(H,-2),1,0)
```

Buy Experts :

Type / Change in Highlights:

Buy Bullish SetUp (Color: Cyan)

```
Fml( "TD - SetUp-Buy" ) =1 OR
Ref( Fml( "TD - SetUp-Buy" ) ,1)=1 OR
Ref( Fml( "TD - SetUp-Buy" ) ,2)=1 OR
Ref( Fml( "TD - SetUp-Buy" ) ,3)=1 OR
Ref( Fml( "TD - SetUp-Buy" ) ,5)=1 OR
Ref( Fml( "TD - SetUp-Buy" ) ,6)=1 OR
Ref( Fml( "TD - SetUp-Buy" ) ,7)=1 OR
Ref( Fml( "TD - SetUp-Buy" ) ,8)=1
```

Buy Count Down (Color: Blue)

```
( Fml( "TD Count Down Buy A" ) =13
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 13) OR  ( Fml( "TD Count Down Buy A" ) =12
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 12) OR  ( Fml( "TD Count Down Buy A" ) =11
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 11) OR  ( Fml( "TD Count Down Buy A" ) =10
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 10) OR  ( Fml( "TD Count Down Buy A" ) =9
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 9) OR  ( Fml( "TD Count Down Buy A" ) =8
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 8) OR  ( Fml( "TD Count Down Buy A" ) =7
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 7) OR  ( Fml( "TD Count Down Buy A" ) =6
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<>6) OR  ( Fml( "TD Count Down Buy A" ) =5
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 5) OR  ( Fml( "TD Count Down Buy A" ) =4
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<> 4) OR ( Fml( "TDCount Down Buy A" ) =3
AND Ref( Fml( "TD Count Down Buy A" ) ,-1 )<>3) OR  ( Fml( "TD Count Down Buy A" ) =2
```

AND Ref(Fml("TD Count Down Buy A") ,-1)<>2)

Buy A (Color: Green)

(Fml("TD Count Down Buy A") =14 AND Ref(Fml("TD Count DownBuy A"),-1)<> 14)

Buy B (Color: Green)

A:=If(Fml("TD Count Down Buy A") =14
AND Ref(Fml("TD Count Down Buy A") ,-1)<> 14,1,0);
B:=If(Ref(Fml("TD Count Down Buy B"),-1) =1,1,0);
HighestSinceBars(1,A =1,A)<HighestSinceBars(1,B=1,B) AND Fml("TD Count Down Buy B") =1

Buy C (Color: Green)

A:=If(Fml("TD Count Down Buy A") =14
AND Ref(Fml("TD Count Down Buy A") ,-1)<> 14,1,0);
B:=If(Ref(Fml("TD Count Down Buy C"),-1) =1,1,0);
HighestSinceBars(1,A =1,A)<HighestSinceBars(1,B=1,C) AND Fml("TD CountDown Buy C") =1

Type / Change in Symbols:

SetUp9 (Label: 9 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Fml("TD - SetUp-Buy")=1

SetUp8 (Label: 8 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy"),1)=1

SetUp7 (Label: 7 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy") ,2)=1

SetUp6 (Label: 6 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy") ,3)=1

SetUp5 (Label: 5 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy") ,4)=1

SetUp4 (Label: 4 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy") ,5)=1

SetUp3 (Label: 3 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy") ,6)=1

SetUp2 (Label: 2 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy") ,7)=1

SetUp1 (Label: 1 / Font: 8 / Color: Magenta / Position: Below / Graphics:None)

Ref(Fml("TD - SetUp-Buy") ,8)=1

CountDown1 (Label: 1 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =2 AND Ref(Fml("TD Count Down Buy A") ,-1)<>2

CountDown2 (Label: 2 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =3 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 3

CountDown3 (Label: 3 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =4 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 4

CountDown4 (Label: 4 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =5 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 5

CountDown5 (Label: 5 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =6 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 6

CountDown6 (Label: 6 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =7 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 7

CountDown7 (Label: 7 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =8 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 8

CountDown8 (Label: 8 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =9 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 9

CountDown9 (Label: 9 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =10 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 10

CountDown10 (Label: 10 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =11 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 11

CountDown11 (Label: 11 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =12 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 12

CountDown12 (Label: 12 / Font: 8 / Color: Brown / Position: Below / Graphics:None)

Fml("TD Count Down Buy A") =13 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 13

CountDown13 (Label: Buy A / Font: 9 / Color: Green / Position: Below / Graphics:Buy Arrow)

Fml("TD Count Down Buy A") =14 AND Ref(Fml("TD Count Down Buy A") ,-1)<> 14

Buy B (Label: Buy B / Font: 9 / Color: Green /Position: Below / Graphics:Buy Arrow)

```
A:=If( Fml( "TD Count Down Buy A" ) =14 AND Ref( Fml( "TD CountDown Buy A") ,-1 )<> 14,1,0);
B:=If( Ref(Fml( "TD Count Down Buy B" ),-1) =1,1,0);
HighestSinceBars(1,A =1,A )<HighestSinceBars(1,B=1,B ) AND Fml( "TD Count Down Buy B" ) =1
```

Buy C (Label: Buy C / Font: 9 / Color: Green /Position: Below / Graphics:Buy Arrow)

```
A:=If( Fml( "TD Count Down Buy A" ) =14 AND Ref( Fml( "TD CountDown Buy A") ,-1 )<> 14,1,0);
B:=If( Ref(Fml( "TD Count Down Buy C" ),-1) =1,1,0);
HighestSinceBars(1,A =1,A )<HighestSinceBars(1,B=1,C ) AND Fml( "TD Count Down Buy C" ) =1
```

Sell Indicators :

TD - SetUp-Sell

```
TD1:=If(C>Ref(C,-4),1,0);
TD2:=If(TD1=1 AND Ref(TD1,-1)=1 AND Ref(TD1,-2)=1 AND Ref(TD1,-3)=1 AND Ref(TD1,-4)=1
AND
Ref(TD1,-5)=1 AND Ref(TD1,-6)=1 AND Ref(TD1,-7)=1 AND Ref(TD1,-8)=1,1,0);

TD3:=If(Ref(C,-9)<=Ref(C,-13),1,0);

TD4:=If(TD2=1 AND TD3=1,1,0);

TD5:=If(L>=Ref(HHV(H,5),-3),1,0);

D8:=If(Ref(TD4,1)=1 AND TD5=1,1,0);

D9:=If(TD4=1 AND TD5=1 AND Ref(D8,-1)<>1,1,0);

D10:=If(Ref(TD4,-1)=1 AND TD5=1 AND Ref(D8,-2)<>1 AND Ref(D9,-1)<>1,1,0);

D11:=If(Ref(TD4,-2)=1 AND TD5=1 AND Ref(D8,-3)<>1 AND Ref(D9,-2)<>1 AND Ref(D10,-
1)<>1,1,0);

D12:=If(Ref(TD4,-3)=1 AND TD5=1 AND Ref(D8,-4)<>1 AND Ref(D9,-3)<>1 AND
Ref(D10,-2)<>1 AND Ref(D11,-1)<>1,1,0);

D13:=If(Ref(TD4,-4)=1 AND TD5=1 AND Ref(D8,-5)<>1 AND Ref(D9,-4)<>1 AND
Ref(D10,-3)<>1 AND Ref(D11,-2)<>1 AND Ref(D12,-1)<>1,1,0);

D14:=If(Ref(TD4,-5)=1 AND TD5=1 AND Ref(D8,-6)<>1 AND Ref(D9,-5)<>1 AND
Ref(D10,-4)<>1 AND Ref(D11,-3)<>1 AND Ref(D12,-2)<>1 AND Ref(D13,-1)<>1,1,0);
```

```
D15:=If(Ref(TD4,-6)=1 AND TD5=1 AND Ref(D8,-7)<>1 AND Ref(D9,-6)<>1 AND
Ref(D10,-5)<>1 AND Ref(D11,-4)<>1 AND Ref(D12,-3)<>1 AND
Ref(D13,-2)<>1 AND Ref(D14,-1)<>1,1,0);

D16:=If(Ref(TD4,-7)=1 AND TD5=1 AND Ref(D8,-8)<>1 AND Ref(D9,-7)<>1 AND
Ref(D10,-6)<>1 AND Ref(D11,-5)<>1 AND Ref(D12,-4)<>1 AND Ref(D13,-3)<>1 AND
Ref(D14,-2)<>1 AND Ref(D15,-1)<>1,1,0);

D17:=If(Ref(TD4,-8)=1 AND TD5=1 AND Ref(D8,-9)<>1 AND Ref(D9,-8)<>1 AND
Ref(D10,-7)<>1 AND Ref(D11,-6)<>1 AND Ref(D12,-5)<>1 AND Ref(D13,-4)<>1 AND
Ref(D14,-3)<>1 AND Ref(D15,-2)<>1 AND Ref(D16,-1)<>1,1,0);

SetUp:=D8+D9+D10+D11+D12+D13+D14+D15+D16+D17;
SetUp
```

TD Count Down Sell A

```
Cum(If(C>Ref(C,-2),1,0))-ValueWhen(1,Ref( Fml( "TD - SetUp-Sell" ), 1)=1, Cum(If(C>Ref(C,-
2),1,0)))
```

TD Count Down Sell B

```
If(Fml( "TD Count Down Sell A" )>=14 AND C<Ref(C,-4),1,0)
```

TD Count Down Sell C

```
If(Fml( "TD Count Down Sell A" )>=14 AND C<Ref(H,-2),1,0)
```

Sell Experts :

Type / Change in Highlights:

Sell Bearish Setup (Color: Cyan)

```
Fml( "TD - SetUp-Sell" ) =1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,1)=1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,2)=1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,3)=1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,4)=1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,5)=1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,6)=1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,7)=1 OR
Ref( Fml( "TD - SetUp-Sell" ) ,8)=1
```

Sell Count Down (Color: Blue)

```
( Fml( "TD Count Down Sell A" ) =13
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 13) OR  ( Fml("TD Count Down Sell A" ) =12
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 12) OR  ( Fml("TD Count Down Sell A" ) =11
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 11) OR  ( Fml("TD Count Down Sell A" ) =10
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 10) OR  ( Fml("TD Count Down Sell A" ) =9
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 9) OR  ( Fml( "TD Count Down Sell A" ) =8
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 8) OR  ( Fml( "TD Count Down Sell A" ) =7
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 7) OR  ( Fml( "TD Count Down Sell A" ) =6
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 6) OR  ( Fml( "TD Count Down Sell A" ) =5
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 5) OR  ( Fml( "TD Count Down Sell A" ) =4
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 4) OR  ( Fml( "TD Count Down Sell A" ) =3
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 3) OR  ( Fml( "TD Count Down Sell A" ) =2
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 2)
```

Sell A (Color: Green)

```
( Fml( "TD Count Down Sell A" ) =14
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 14)
```

Sell B (Color: Green)

```
A:=If( Fml( "TD Count Down Sell A" ) =14
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 14,1,0);
B:=If( Ref(Fml( "TD Count Down Sell B" ),-1) =1,1,0);
HighestSinceBars(1,A =1,A )<HighestSinceBars(1,B=1,B ) AND Fml( "TD Count Down Sell B" ) =1
```

Sell C (Color: Green)

```
A:=If( Fml( "TD Count Down Sell A" ) =14
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 14,1,0);
B:=If( Ref(Fml( "TD Count Down Sell C" ),-1) =1,1,0);
HighestSinceBars(1,A =1,A )<HighestSinceBars(1,B=1,C ) AND Fml( "TD Count Down Sell C" ) =1
```

Type / Change in Symbols:

SetUp9 (Label: 9 / Font: 8 / Color: Magenta / Position: Above / Graphics:None)

```
Fml( "TD - SetUp-Sell" )=1
```

SetUp8 (Label: 8 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

```
Ref( Fml( "TD - SetUp-Sell" ),1)=1
```

SetUp7 (Label: 7 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

Ref(Fml("TD - SetUp-Sell"),2)=1

SetUp6 (Label: 6 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

Ref(Fml("TD - SetUp-Sell"),3)=1

SetUp5 (Label: 5 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

Ref(Fml("TD - SetUp-Sell"),4)=1

SetUp4 (Label: 4 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

Ref(Fml("TD - SetUp-Sell"),5)=1

SetUp3 (Label: 3 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

Ref(Fml("TD - SetUp-Sell"),6)=1

SetUp2 (Label: 2 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

Ref(Fml("TD - SetUp-Sell"),7)=1

SetUp1 (Label: 1 / Font: 8 / Color: Magenta / Position: Above/ Graphics:None)

Ref(Fml("TD - SetUp-Sell"),8)=1

CountDown1 (Label: 1 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =2
AND Ref(Fml("TD Count Down Sell A") ,-1)<>2

CountDown2 (Label: 2 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =3
AND Ref(Fml("TD Count Down Sell A") ,-1)<>3

CountDown3 (Label: 3 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =4
AND Ref(Fml("TD Count Down Sell A") ,-1)<>4

CountDown4 (Label: 4 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =5
AND Ref(Fml("TD Count Down Sell A") ,-1)<>5

CountDown5 (Label: 5 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =6
AND Ref(Fml("TD Count Down Sell A") ,-1)<>6

CountDown6 (Label: 6 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =7
AND Ref(Fml("TD Count Down Sell A") ,-1)<>7

CountDown7 (Label: 7 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =8
AND Ref(Fml("TD Count Down Sell A") ,-1)<>8

CountDown8 (Label: 8 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =9
AND Ref(Fml("TD Count Down Sell A") ,-1)<>9

CountDown9 (Label: 9 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =10
AND Ref(Fml("TD Count Down Sell A") ,-1)<>10

CountDown10 (Label: 10 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =11
AND Ref(Fml("TD Count Down Sell A") ,-1)<>11

CountDown11 (Label: 11/ Font: 8 / Color: Brown / Position: Above / Graphics:None)

Fml("TD Count Down Sell A") =12
AND Ref(Fml("TD Count Down Sell A") ,-1)<>12

CountDown12 (Label: 12 / Font: 8 / Color: Brown / Position: Above / Graphics:None)

```
Fml( "TD Count Down Sell A" ) =13
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<>13
```

CountDown13 (Label: Sell A / Font: 9 / Color: Red / Position:Above / Graphics:Sell Arrow)

```
Fml( "TD Count Down Sell A" ) =14
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<>14
```

Sell B (Label: Sell B / Font: 9 / Color: Red / Position: Above / Graphics:Sell Arrow)

```
A:=If( Fml( "TD Count Down Sell A" ) =14
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 14,1,0);
B:=If( Ref(Fml( "TD Count Down Sell B" ),-1) =1,1,0);
HighestSinceBars(1,A =1,A )<HighestSinceBars(1,B=1,B ) AND Fml( "TD Count Down Sell B" ) =1
```

Sell C (Label: Sell C / Font: 9 / Color: Red / Position: Above / Graphics:Sell Arrow)

```
A:=If( Fml( "TD Count Down Sell A" ) =14
AND Ref( Fml( "TD Count Down Sell A" ) ,-1 )<> 14,1,0);
B:=If( Ref(Fml( "TD Count Down Sell C" ),-1) =1,1,0);
HighestSinceBars(1,A =1,A )<HighestSinceBars(1,B=1,C ) AND Fml( "TD Count Down Sell C" ) =1
```

Double Stochastics Expert

Buy Highlight:

```
P1:=Mov(((C-LLV(L,10))/(HHV(H,10)-LLV(L,10)))*100,3,E);
dblSto10:=Mov(((P1-LLV(P1,10))/(HHV(P1,10)-LLV(P1,10)))*100,3,E);
buy:=dblSto10<40 AND dblSto10>Ref(dblSto10,-1) AND Ref(dblSto10,-1)<Ref(dblSto10,-2);
buy
```

Sell Highlight:

```
P1:=Mov(((C-LLV(L,10))/(HHV(H,10)-LLV(L,10)))*100,3,E);
dblSto10:=Mov(((P1-LLV(P1,10))/(HHV(P1,10)-LLV(P1,10)))*100,3,E);
sell:=dblSto10>70 AND dblSto10<Ref(dblSto10,-1) AND
Ref(dblSto10,-1)>Ref(dblSto10,-2);
sell
```

Dynamic Moving Vertical Lines Expert

```
{Place the following in "Trends"/"Bullish"}
n:=89;
LastLoadedBarNum:=LastValue(Cum(1));
Cum(1)=(LastLoadedBarNum-n)+1
```

Fibonacci Ratios and Momentum

Highlights

Name: RSI > 50
Condition: RSI(14) > 50
Color: Dk Green

Name: RSI < 50
Condition: RSI(14) < 50
Color: Red

Symbols

Name : Isolated Low
Graphic : Buy Arrow
Color : Black
Label : Isolated Low
Condition :

LOW < Ref(LOW,-1) AND LOW < Ref(LOW,1)

Name : Isolated High
Graphic : Sell Arrow
Color : Black
Label : Isolated High
Condition :

HIGH > Ref(HIGH,-1) AND HIGH > Ref(HIGH,1)

Fractal Up and Fractal Down Expert by Manoj P. Abraham
Up Fractal

```
(If( HIGH > Ref( HIGH , -1 ), 1 ,0 ) AND
  If( HIGH > Ref( HIGH , -2 ), 1 ,0 ) AND
   If( HIGH > Ref( HIGH , +1 ), 1 ,0 ) AND
    If( HIGH > Ref( HIGH , +2 ), 1 ,0 ))
```

Down Fractal

```
(If( LOW < Ref( LOW , -1 ), 1 ,0 ) AND
  If( LOW < Ref( LOW , -2 ), 1 ,0 ) AND
   If( LOW < Ref( LOW , +1 ), 1 ,0 ) AND
    If( LOW < Ref( LOW , +2 ), 1 ,0 )
```

GANN Swing Expert

GANN - Swing

```
Us:=BarsSince((H > Ref(H,-1)) AND (Ref(H,-1) >
Ref(H,-2)));
Ds:=BarsSince((L < Ref(L,-1)) AND (Ref(L,-1)<
Ref(L,-2)));
Sd1:=If(Us=0,
{then}If(Ref(L,-1)<>LowestSince(1,Ds=0,L),
{then}1,
{else}0),
{else}If(Ds=0,
{then}If(Ref(H,-1)<>
HighestSince(1,Us=0,H),
{then}-1,
{else}0),
{else}0));
Sd2:=If(Sd1=1,
{then} If(Ref(BarsSince(Sd1=1),-1) >
Ref(BarsSince(Sd1=-1),-1),
{then}1,
{else}0),
{else} If(Sd1=-1,
{then}If(Ref(BarsSince(Sd1=1),-1) <
Ref(BarsSince(Sd1=-1),-1),
{then}-1,
{else}0),
{else}0));
TD1:=ValueWhen(1,Sd2<>0,Sd2);
Td1;
```

GANN - Trend

```
Sd:= FmlVar("GANN - Swing","TD1") ;
{Swing Change High}
Sch:=If(Sd=1 AND Ref(sd,-1)=-1,
{then}1,
{else}0);
{Swing Change Low}
Scl:=If(Sd=-1 AND Ref(Sd,-1)=1,
{then}1,
{else}0);
{Peak Value}
Pv:=If(Scl=1,
{then}HighestSince(1,Sch=1,H),
{else}0);
{Trough Value}
Tv:=If(Sch=1,
{then}LowestSince(1,Scl=1,L),
{else}0);
{Trend Direction}
Td:=If(H>ValueWhen(1,Pv>0,Pv),
{then}1,
{else}If(L<ValueWhen(1,Tv>0,Tv),
{then}-1,
{else}0));
{UpTrend=1 DownTrend =-1}
```

```
Tdv:=ValueWhen(1,Td<>0,Td);
Tdv
```

GaW-Swing

```
Dw:=If(DayOfWeek()<=Ref(DayOfWeek(),-1),1,0);
Wh:=If(Dw=1,
{then}Ref(HighestSince(1,Dw=1,H),-1),
{else}0);
Wl:=If(Dw=1,
{then}Ref(LowestSince(1,Dw=1,L),-1),
{else}0);
Hv1:=ValueWhen(1,Wh>0,Wh);
Hv2:=ValueWhen(2,Wh>0,Wh);
Hv3:=ValueWhen(3,Wh>0,Wh);
Lv1:=ValueWhen(1,Wl>0,Wl);
Lv2:=ValueWhen(2,Wl>0,Wl);
Lv3:=ValueWhen(3,Wl>0,Wl);
Us:=BarsSince((Hv1 > Hv2) AND (Hv2 > Hv3));
Ds:=BarsSince((Lv1 < Lv2) AND (Lv2 < Lv3));
Hc:=Ref(HighestSince(1,Us=0 AND Ref(Us,-1)>0,H),
-1);
Lc:=Ref(LowestSince(1,Ds=0 AND Ref(Ds,-1)>0,L),
-1);
{Swing direction Calculation}
Sd1:=If(Us=0 AND Dw=1,
{then}If((Lv1<>Lc) AND (Lv2<>Lc),
{then}1,
{else}0),
{else}If(Ds=0,
{then}If((Hv1<>Hc) AND (Hv2<>Hc),
{then}-1,
{else}0),
{else}0));
Sd2:=If(Sd1=1,
{then} If(Ref(BarsSince(Sd1=1),-1) >
Ref(BarsSince(Sd1=-1),-1),
{then}1,
{else}0),
{else} If(Sd1=-1,
{then}If(Ref(BarsSince(Sd1=1),-1) <
Ref(BarsSince(Sd1=-1),-1),
{then}-1,
{else}0),
{else}0));
TD1:=ValueWhen(1,Sd2<>0,Sd2);
TD1
```

GaW-Trend

```
Sd:= FmlVar("GaW-Swing","TD1") ;
{Swing Change High}
Sch:=If(Sd=1 AND Ref(sd,-1)=-1,
{then}1,
{else}0);
```

```
{Swing Change Low}
Scl:=If(Sd=-1 AND Ref(Sd,-1)=1,
{then}1,
{else}0);
{Peak Value}
Pv:=If(Scl=1,
{then}HighestSince(1,Sch=1,H),
{else}0);
{Trough Value}
Tv:=If(Sch=1,
{then}LowestSince(1,Scl=1,L),
{else}0);
{Trend Direction}
Td:=If(H>ValueWhen(1,Pv>0,Pv),
{then}1,
{else}If(L<ValueWhen(1,Tv>0,Tv),
{then}-1,
{else}0));
{UpTrend=1 DownTrend =-1}
Tdv:=ValueWhen(1,Td<>0,Td);
Tdv
```

1. First create a new expert and name it whatever you want.

2a. under " Trends" tab put this code for Bullish :

```
ut:=FmlVar("GANN - Trend","TDV");
uplot:=If(BarsSince(Ut=1)<
BarsSince(Ut=-1),1,0);
uplot=1;
```

2b. and this for Bearish :

```
dt:=FmlVar("GANN - Trend","TDV");
dplot:=If(BarsSince(dt=1)>
BarsSince(dt=-1),1,0);
dplot=1;
```

Then click on the "ribbon" option and turn off "Display Vertical Lines", I also turn off the corner option.

3a. Under highlights tab create a new and call it "HiLo Change ", choose color, and enter this code:

```
HLd:=If(CLOSE>Ref(Mov(H,3,S),-1),
{then}1,
{else}If(CLOSE<Ref(Mov(L,3,S),
-1),
{then}-1,
{else}0));
HLv:=ValueWhen(1,HLd<>0,HLd);
HLv<>Ref(HLv,-1);
```

3b. Create new and call it "Up-Trend" , choose color, and enter this code:

```
ut:=FmlVar("GANN - Trend","TDV");
uplot:=If(BarsSince(Ut=1)<
BarsSince(Ut=-1),1,0);
uplot=1;
```

3c. Create new and call it "Down-Trend ", choose color, and enter this code:

```
dt:=FmlVar("GANN - Trend","TDV");
dplot:=If(BarsSince(dt=1)>
BarsSince(dt=-1),1,0);
dplot=1;
```

4a. Under "Symbols" tab create new and call it "UpSwing", enter this code:

```
FmlVar("GANN - Swing","SD2")=1;
```

then under graphic choose "Buy Arrow", choose color (Dark Green), and small size, then pick "Above Price Plot".

4b. Create new and call it "DownSwing ", enter this code:

```
FmlVar("GANN - Swing","SD2")=-1;
```

then under graphic choose "sell arrow", choose color (Dark Red), and small size, then pick "Below Price Plot".

As for the HiLo ....just plot it as a regular indicator and choose the last "style" option under "color/style" tab.

Note: For daily bar charts ribbon use these formulas:

2a.

```
ut:= FmlVar("GaW-Trend","TDV") ;
uplot:=If(BarsSince(Ut=1)<
BarsSince(Ut=-1),1,0);
uplot=1;
```

2b.

```
dt:= FmlVar("GaW-Trend","TDV") ;
dplot:=If(BarsSince(dt=1)>
BarsSince(dt=-1),1,0);
dplot=1;
```

Hilbert Squelch Threshold Expert by John Ehlers
Hilbert cycle period - 1a

```
value1:=((H+L)/2) - Ref(((H+L)/2),-6);
value2:= Ref(value1,-3);
value3:=0.75*(value1-Ref(value1,-6)) + 0.25*(Ref(value1,-2)-Ref(value1,-4));
inphase:= 0.33 * value2 + (0.67 * PREV);
quad:= 0.2 * value3 + ( 0.8 * PREV);
```

```
p1:=Atan(Abs(quad+Ref(quad,-1)),Abs(inphase+Ref(inphase,-1)));
phase:=If(inphase<0 AND quad>0, 180-p1,
If(inphase<0 AND quad<0, 180+p1,
If(inphase>0 AND quad<0, 360-p1,p1)));
dp:=If(Ref(phase,-1)<90 AND phase>270, 360+Ref(phase,-1)-phase,Ref(phase,-1)-phase);
dp2:=If(dp < 1, 1,
If(dp > 60, 60, dp));
dp2
```

H cycle count 1a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,6)>=360 AND Sum(value,5)<360 ,6,0) +
If(Sum(value,7)>=360 AND Sum(value,6)<360 ,7,0) +
If(Sum(value,8)>=360 AND Sum(value,7)<360 ,8,0) +
If(Sum(value,9)>=360 AND Sum(value,8)<360 ,9,0) +
If(Sum(value,10)>=360 AND Sum(value,9)<360 ,10,0) +
If(Sum(value,11)>=360 AND Sum(value,10)<360 ,11,0) +
If(Sum(value,12)>=360 AND Sum(value,11)<360 ,12,0) +
If(Sum(value,13)>=360 AND Sum(value,12)<360 ,13,0) +
If(Sum(value,14)>=360 AND Sum(value,13)<360 ,14,0) +
If(Sum(value,15)>=360 AND Sum(value,14)<360 ,15,0)
```

H cycle count 2a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,16)>=360 AND Sum(value,15)<360 ,16,0) +
If(Sum(value,17)>=360 AND Sum(value,16)<360 ,17,0) +
If(Sum(value,18)>=360 AND Sum(value,17)<360 ,18,0) +
If(Sum(value,19)>=360 AND Sum(value,18)<360 ,19,0) +
If(Sum(value,20)>=360 AND Sum(value,19)<360 ,20,0) +
If(Sum(value,21)>=360 AND Sum(value,20)<360 ,21,0) +
If(Sum(value,22)>=360 AND Sum(value,21)<360 ,22,0) +
If(Sum(value,23)>=360 AND Sum(value,22)<360 ,23,0) +
If(Sum(value,24)>=360 AND Sum(value,23)<360 ,24,0) +
If(Sum(value,25)>=360 AND Sum(value,24)<360 ,25,0)
```

H cycle count 3a

```
value:= Fml("Hilbert cycle period - 1a");
If(Sum(value,26)>=360 AND Sum(value,25)<360 ,26,0) +
If(Sum(value,27)>=360 AND Sum(value,26)<360 ,27,0) +
If(Sum(value,28)>=360 AND Sum(value,27)<360 ,28,0) +
If(Sum(value,29)>=360 AND Sum(value,28)<360 ,29,0) +
If(Sum(value,30)>=360 AND Sum(value,29)<360 ,30,0) +
If(Sum(value,31)>=360 AND Sum(value,30)<360 ,31,0) +
If(Sum(value,32)>=360 AND Sum(value,31)<360 ,32,0) +
If(Sum(value,33)>=360 AND Sum(value,32)<360 ,33,0) +
If(Sum(value,34)>=360 AND Sum(value,33)<360 ,34,0) +
If(Sum(value,35)>=360 AND Sum(value,34)<360 ,35,0)
```

Hilbert cycle period - final-a

c1:= Fml("H cycle count 1a") + Fml("H cycle count 2a") + Fml("Hcycle count 3a") ;
c2:=If(c1=0,PREV,c1);
(0.25*c2) + (0.75*PREV)

To create the indicator as a highlight, select Expert Advisor from the Tools menu.
Click New, enter “Hilbert Squelch Indicator” for the name, and select the Highlights page.
Click New and enter the following formula

Hilbert Squelch Threshold

Squelch:=20;
Fml("Hilbert cycle period - final-a")<Squelch

Key Reversals Expert

L < Ref(L,-1) AND C>Ref(C,-1) AND C < H
To identify the pattern, use the following formula in either the Expert Advisor as a symbol/alert, in the Explorer as an exploration filter, or in the Indicator Builder as a new indicator:

Market Facilitation Index Expert by Thom Hartle
The first step is to create a new expert by choosing Expert Advisor fromMetaStock's Tool menu, and then choose New from the Expert Advisor. Namethe expert "Market Facilitation Index", enter any notes you like and thenclick on the Highlights tab. Enter the following Highlights by choosing New,the color and then entering the following formulas:

Market Facilitation Index Expert Advisor

Green Bar (Green Bar)
ROC((H-L)/V,1,$) > 0 AND ROC(V,1,$) > 0

Fade Bar (Blue Bar)
ROC((H-L)/V,1,$) < 0 AND ROC(V,1,$) < 0

Fake Bar (Dk Gray Bar)
ROC((H-L)/V,1,$) > 0 AND ROC(V,1,$) < 0

Squat Bar (Red Bar)
ROC((H-L)/V,1,$) < 0 AND ROC(V,1,$) > 0

Mutated, Variables ... by Walter T. Downs, Ph.D.
In MetaStock for Windows 6.0 or higher, use the Expert Advisor to create highlights, which will show when contraction and expansion phases are present. First, choose Expert Advisor from the tools menu in MetaStock. Create a new Expert with the following highlights :
New Market Paradigm

Name : Contraction
Color : Blue
Condition :

BBandTop(CLOSE,28,SIMPLE,2)< Ref(BBandTop(CLOSE,28,SIMPLE,2),-1)AND
BBandBot(CLOSE,28,SIMPLE,2)>Ref(BBandBot(CLOSE,28,SIMPLE,2),-1)

Name : Expansion
Color : Red
Condition :

BBandTop(CLOSE,28,SIMPLE,2)> Ref(BBandTop(CLOSE,28,SIMPLE,2),-1)AND
BBandBot(CLOSE,28,SIMPLE,2)<Ref(BBandBot(CLOSE,28,SIMPLE,2),-1)

Smoothed Stochastic Expert

Buy Highlight:

```
P1:=Mov(((C-LLV(L,10))/(HHV(H,10)-LLV(L,10)))*100,3,E);
dblSto10:=Mov(((P1-LLV(P1,10))/(HHV(P1,10)-LLV(P1,10)))*100,3,E);
buy:=dblSto10<40 AND dblSto10>Ref(dblSto10,-1) AND
Ref(dblSto10,-1)<Ref(dblSto10,-2);
buy
```

Sell Highlight:

```
P1:=Mov(((C-LLV(L,10))/(HHV(H,10)-LLV(L,10)))*100,3,E);
dblSto10:=Mov(((P1-LLV(P1,10))/(HHV(P1,10)-LLV(P1,10)))*100,3,E);
sell:=dblSto10>70 AND dblSto10<Ref(dblSto10,-1) AND
Ref(dblSto10,-1)>Ref(dblSto10,-2);
sell
```

Swing
Trading
Expert

Inside(), outside(), rally(), reaction(), reactionwithvol() and rallywithvol() are all FUNCTIONS and described as such in the manual. These are not indicators, but can be used in writing an indicator. If you want to see rallywithvol() as an indicator, hit your formula button and call your new indicator rallywithvol. Then in the formula window, click on FUNCTIONS, highlight rallywithvol() and paste it in. Voila, you now have an indicator that reflects the rallywithvol() function. If you want to create a shortterm swing type trading system with these functions getting insights to theiruse which can be had by reading the description of these functions in the manual, create an expert and type the following:

Swing Trading Expert

(RallyWithVol() OR Rally()) AND Ref(Inside() OR Outside(),-1)

Squelch Threshold by John Ehlers
Hilbert cycle period - final-a

```
c1:= Fml( "H cycle count 1a") + Fml( "H cycle count 2a") + Fml( "H cycle count 3a") ;
c2:=If(c1=0,PREV,c1);
```

(0.25*c2) + (0.75*PREV)

To create the indicator as a highlight, select Expert Advisor from the Tools menu. Click New, enter "Squelch Indicator" for the name, and select the Highlights page. Click New and enter the following formula:

Squelch Threshold

```
Squelch:=20;
Fml("Hilbert cycle period - final-a")<Squelch
```

%BandsI

I found a problem with the %Bands formulas posted yesterday. No matter what optional parameters are entered for EMA lengthor % bandwidth, the Expert appears to read only the default values. As aresult, when using other than default parameters, the coloured dots appearin inappropriate places. If the coloured dots are considered unnecessarythe Expert can simply be detached.

Alternatively, below is a hard-coded version. There is no screen to enter optional parameters. Instead, plot the %Bands formula,then right-click on one of the bands, select '%Bands Properties', then the 'Formula' tab, and change the parameters in the first two lines of the %Bands formula; click 'OK'. Or make the change in the Formula Editor. The values need to be entered only once, in the %Bands formula; the %BandsCount formula and the Expertwill take their values from that. For regular use, get the display to yourliking, then create a template.

%Bands

```
Pds:= 21; {ENTER EMA LENGTH}
Pct:= 2.5; {ENTER PERCENT BANDWIDTH}
MA:= Mov(C,Pds,E);
TBnd:= MA*(1+Pct/100);
LBnd:= MA*(1-Pct/100);
MA; TBnd; LBnd;
```

%BandsCount

```
{USE WITH %BANDS FORMULA}

TBnd:= FmlVar("%Bands","TBND");
IUp:= (H > TBnd) * Ref((H <= TBnd),-1);
CntUp:= IUp + BarsSince(IUp=1) * (H > TBnd);
LBnd:= FmlVar("%Bands","LBND");
IDn:= (L < LBnd) * Ref((L >= LBnd),-1);
CntDn:= IDn + BarsSince(IDn=1) * (L < LBnd);
CntUp; -CntDn;
```

%Bands I Expert

Symbols tab.
NAME: %BandUp

```
FmlVar("%BandsCount","CNTUP") >= 1
```

Graphic tab: Dot, Small, Green, Above price plot

Symbols tab.
NAME: %BandDn

FmlVar("%BandsCount","CNTDN") >= 1

Graphic tab: Dot, Small, Magenta, Below price plot

%Bands II
%Bands II

```
Pds:= Input("EMA Periods?",1,1000,21);
Pct:= Input("Percentage Bands?",0.1,10,5);
MA:= Mov(C,Pds,E);
TBnd:= MA*(1+Pct/100);
LBnd:= MA*(1-Pct/100);
MA;TBnd;LBnd;
```

%BandsCount II

```
Pds:= Input("EMA Periods?",1,1000,21);
Pct:= Input("Percentage Bands?",0.1,10,5);
MA:= Mov(C,Pds,E);
TBnd:= MA*(1+Pct/100);
LBnd:= MA*(1-Pct/100);
IUp:= (H > TBnd) * Ref((H <= TBnd),-1);
CntUp:= IUp + BarsSince(IUp=1) * (H > TBnd);
IDn:= (L < LBnd) * Ref((L >= LBnd),-1);
CntDn:= IDn + BarsSince(IDn=1) * (L < LBnd);
CntUp; -CntDn;
```

%Bands II Expert

Symbols tab.
Name: %BandUp

FmlVar("%BandsCount II","CNTUP") >= 1

Graphic: Dot, Small, Green, Above price plot

Symbols tab.
Name: %BandDn

FmlVar("%BandsCount II","CNTDN") >= 1

Graphic: Dot, Small, Magenta, Below price plot

EXPLORER

Accumulation or Disribution?
Accummulation:

col A:
(C>(H+L)/2)

col B:

(C>(H+L)/2)*VOLUME {value of accummulation}

Distribution:

col C:
(C<(H+L)/2)

col D:
(C<(H+L)/2)*VOLUME {value of distribution}

filter:
cola=1 or colc=1

Average Dollar Price Volatility Exploration - Deel

Col A: day 1 HIGH - LOW

Col B: day 2 Ref((HIGH-LOW),-1)

Col C: Ref((HIGH-LOW),-2)

Col D: Ref((HIGH-LOW),-3)

Col E: Ref((HIGH-LOW),-4)

Col F: (H - L + (Ref(H,-1) - Ref(L,-1)) + (Ref(H,-2) - Ref(L,-2))+(Ref(H,-3) - Ref(L,-3)) + (Ref(H,-4) - Ref(L,-4))) / 5

ADX Rising Expoloration 1

Column A:
ADX(21)

Filter:
ADX(21)>25 AND
ADX(21)>Ref(ADX(21),-1) AND
Ref(ADX(21),-1)>Ref(ADX(21),-2) AND
Ref(ADX(21),-2)>Ref(ADX(21),-3)

ADX Rising Expoloration 2

Column A:
ADX(21)

Column B:
Ref(ADX(21),-1)

Filter:
ADX(21)>ADXR(21) AND

Ref(ADX(21),-1)<=Ref(ADXR(21),-1

Boomers Buy & Sell

A:
Close

B:
{Signal Buy=-1,Sell=1}
If(ADX(14)>30 and PDI(14)>MDI(14),-1,If(ADX(14)>30 and PDI(14)<MDI(14),1,0))

C:
{setup}Ref(H,-2)>=Ref(H,-1) and Ref(H,-1)>=H and Ref(L,-2)<=Ref(L,-1) and Ref(L,-1)<=L

D:
{Entry}If(ADX(14)>30 and PDI(14)>MDI(14) and Ref(H,-2)>=Ref(H,-1) and Ref(H,-1)>=H and Ref(L,-2)<=Ref(L,-1) and Ref(L,-1)<=L,HHV(H,3)+.125,IF(ADX(14)>30 and PDI(14)<MDI(14) and Ref(H,-2)>=Ref(H,-1) and Ref(H,-1)>=H and Ref(L,-2)<=Ref(L,-1) and Ref(L,-1)<=L,LLV(L,3)-.125,0))

E:
{Stop}If(ADX(14)>30 and PDI(14)>MDI(14) and Ref(H,-2)>=Ref(H,-1) and Ref(H,-1)>=H and Ref(L,-2)<=Ref(L,-1) and Ref(L,-1)<=L,LLV(L,3)-.125,IF(ADX(14)>30 and PDI(14)<MDI(14) and Ref(H,-2)>=Ref(H,-1) and Ref(H,-1)>=H and Ref(L,-2)<=Ref(L,-1) and Ref(L,-1)<=L,HHV(H,3)+.125,0))

F:
ADX(14){Higher the better}

Filter:
ColB and ColC

Bottom Reversal

Column A
CLOSE

Column B
EngulfingBull()

Column C
MorningDojiStar()

Column D
MorningStar()

Column E
WhiteSoldiers()

Brady Breakout System

col a:
Stoch(5,3)

col b:
Ref(Stoch(5,3), -1)

col c:
MACD()

col d:
Mov(MACD(),9,E)

col e:
Ref(MACD(), -2)

col f:
Ref(Mov(MACD(),9,E),-2)

filter:
enabled = YES

When(C,>,Mov(C,50,E))AND
When(C,>,Mov(C,200,S)) AND
When(colA,<,80)AND When(colA,>,colB)AND
When(colC,<,1)AND When(colC,>,colD)AND
When(colE,<,colF)AND When(colE,<,0)AND
When(Ref(MACD(),-10),<,colC

Bullish Engulfing Pattern

ColA: CLOSE

Filter:
BarsSince(EngulfingBear())<=5 AND
BarsSince(ROC(C,60,%)>15)<=5 AND
BarsSince(Stoch(9,1)>90)<=5

Filter enabled: Yes

Periodicity: Daily

Records required: 1300

Bearish Engulfing Pattern

Col A: CLOSE

Filter: BarsSince(EngulfingBull())<=5 AND
BarsSince(ROC(C,60,%)<-15)<=5 AND
BarsSince(Stoch(9,1)<10)<=5

Filter enabled: Yes

Periodicity: Daily

Records required: 1300

CCI Fibonacci Peak Exploration

CCIF-P

{formula for Cci Fibonacci Peak}
(CCI(8)+CCI(13)+CCI(21))/3

buy: {COLA}

Fml("CCIF-P")>Ref(Fml("CCIF-P"),-1) AND
Cross(Fml("CCIF-P"),-100) OR
Cross(Fml("CCIF-P"),100)

sell:{COLB}

Fml("CCIF-P")<Ref(Fml("CCIF-P"),-1) AND
Cross(100,Fml("CCIF-P")) OR
Cross(-100,Fml("CCIF-P"))

filter:

COLA=1 OR COLB=1

Close Above Median Price

Col a = CLOSE - MP()

Col b = (Ref(CLOSE,-1))-(Ref(MP() ,-1))

Col c = (Ref(CLOSE,-2))-(Ref(MP() ,-2))

Col d = (Ref(CLOSE,-3))-(Ref(MP() ,-3))

Col e = (Ref(CLOSE,-4))-(Ref(MP() ,-4))

Filter = colA>=0 AND colB>=0 AND colC>=0 AND colD>=0 AND colE>=0

Closing Above 60 Day Highs

ColA:
{Close}C

ColB:
{Previous 60-day High} Ref(HHV(H,60),-1)

ColC:
{Current 60-day High} HHV(H,60)

ColD:

{Volume}V

Filter:
(ColA>ColB) AND (Ref(C,-1)<Ref(HHV(H,60),-1)) AND (H=HHV(H,60))

Directional Movement Index Exploration

Ref(Cross(MDI(14) , PDI(14)),-1) AND Cross(PDI(14) , MDI(14))

Dynamic Zone Williams%R Exploration I

ColA:

Mov(WillR(19),70,S)-(1.3185 * Stdev(WillR(19),70))

ColB:

Mov(WillR(19),70,s)

Filter:

Cross(mov(WillR(19),70,s) , Mov(WillR(19),70,S)-(1.3185 * Stdev(WillR(19),70)))

GANN - HiLo Crossover

GANN - HiLo

```
HLd:=If(CLOSE>Ref(Mov(H,3,S),-1),
{then}1,
{else}If(CLOSE<Ref(Mov(L,3,S),-1),
{then}-1,
{else}0));
HLv:=ValueWhen(1,HLd<>0,HLd);
HiLo:=If(HLv=-1,
{then}Mov(H,3,S),
{else}Mov(L,3,S));
HiLo;
```

GANN - HiLo Crossover

ColA buy:
Cross(C, Fml("GANN - HiLo")) AND CLOSE > Fml("GANN - HiLo")

ColB sell:
Cross(C, Fml("GANN - HiLo")) AND CLOSE < Fml("GANN - HiLo")

filter:
cola=1 or colb=1

GANN - HiLo Exploration
GANN - HiLo

```
HLd:=If(CLOSE>Ref(Mov(H,3,S),-1),
{then}1,
```

```
{else}If(CLOSE<Ref(Mov(L,3,S),-1),
{then}-1,
{else}0));
HLv:=ValueWhen(1,HLd<>0,HLd);
HiLo:=If(HLv=-1,
{then}Mov(H,3,S),
{else}Mov(L,3,S));
HiLo;
```

GANN - HiLo Exploration

```
cola
BUY
BarsSince(C< Fml("GANN - HiLo"))

colb
SELL
BarsSince(C> Fml("GANN - HiLo"))

filter
colA=1 OR colB=1
```

Genesis of a Simple Futures Exploration

```
ColumnA: Buy Sign
Cross( Mov( Close,9,S), Mov( Close,50,S)) And Close > Mov( Close,80,S)

ColumnB: Shrt Sig
Cross( Mov( Close,50,S), Mov( Close,9,S)) And Close < Mov( Close,80,S)

FILTER:
colA = 1 OR colB = 1
```

Guppy Multiple Moving Average Exploration

```
MMA 10/45

If(OscP(10,45,E,%)>0,+1,-1)

MMA 12/50

If(OscP(12,50,E,%)>0,+1,-1)

MMA 15/60

If(OscP(15,60,E,%)>0,+1,-1)

MMA 3/30

If(OscP(3,30,E,%)>0,+1,-1)

MMA 5/35

If(OscP(5,35,E,%)>0,+1,-1)

MMA 8/40

If(OscP(8,40,E,%)>0,+1,-1)
```

Guppy Multiple Moving Average Exploration

```
Col A: close
```

CLOSE

Col B:
Ref(C,-1)

Col C:
Ref(C,-2)

Col D:
Fml("MMA 3/30") + Fml("MMA 5/35") + Fml("MMA 8/40") +
Fml("MMA 10/45") + Fml("MMA 12/50") + Fml("MMA 15/60")

Col E:
Ref(Fml("MMA 3/30") + Fml("MMA 5/35") + Fml("MMA 8/40") +
Fml("MMA 10/45")+ Fml("MMA 12/50") + Fml("MMA 15/60") ,-1)

Filter:
When(colD,>,0) AND When(colE,<=,0)

High Volume

Column A
VOLUME

Column B
Mov(VOLUME,100,EXPONENTIAL)

Column C
((VOLUME - Mov(VOLUME,100,EXPONENTIAL))
/Mov(VOLUME,100,EXPONENTIAL)) * 100

Filter
When(colA,>,colB)

Historical Volatility System

Col A: Vol ratio
Std(Log(C/Ref(C,-1)),5) / Std(Log(C/Ref(C,-1)),99)

Col B: NR4 day
High - Low < Ref(LLV(H-L,3),-1)

Col C: Inside
High < Ref(High,-1) AND Low > Ref(Low,-1)

Col D: High
High

Col E: Low
Low

Filter:
ColA < 0.5 AND (ColB = 1 OR ColC = 1)

Jeff Cooper's Exploration's

Jeff Cooper 180's Buy

A:
Close

B:
{MA}
Ref(C,-1)<Mov(C,10,S) AND Ref(C,-1)<Mov(C,50,S) AND C>Mov(c,10,S) AND C>Mov(C,50,S)

C:
{Breakout}
Ref(C,-1)<=((Ref(H,-1)-Ref(L,-1))*.25)+Ref(L,-1) AND C>=H-(H-L)*.25

D:
{Entry}
HHV(H,2)+.125

E:
{Stop}
HHV(H,2)+.125-1

Jeff Cooper 180's Sell

A:
Close

B:
{MA}
Ref(C,-1)>Mov(C,10,S) AND Ref(C,-1)>Mov(C,50,S) AND C<Mov(c,10,S) AND C<Mov(C,50,S)

C:
{Breakout}
Ref(C,-1)>=((Ref(H,-1)-Ref(L,-1))*.25)+Ref(H,-1) AND C<=L+((H-L)*.25)

D:
{Entry}
LLV(L,2)-.125

E:
{Stop}
LLV(L,2)-.125+1

Jeff Cooper Lizards Buy

A:
close

B:
{Signal}
O>H-(H-L)*.25 AND C>H-(H-L)*.25 AND L<Ref(LLV(L,10),-1)

C:
{entry}

H+.125

D:
{Stop}
H+1.125

Filter:
O>H-(H-L)*.25 AND C>H-(H-L)*.25 AND L<Ref(LLV(L,10),-1)

Jeff Cooper Lizards Sell

A:
close

B:
{Signal}
O<L+(H-L)*.25 AND C<L+(H-L)*.25 AND H>Ref(HHV(H,10),-1)

C:
{entry}
L-.125

D:
{Stop}
L-1.125

Filter:
O<L+(H-L)*.25 AND C<L+(H-L)*.25 AND H>Ref(HHV(H,10),-1)

Jeff Cooper Slingshots Buy

A:
Close

B:
{Range breakout}
Ref(H,-1)>=Ref(HHV(H,40),-1) AND L<Ref(L,-1)-.125

C:
{entry}
If(O>Ref(H,-1)+.125,O,0)

D:
{Stop}
If(If(O>Ref(H,-1)+.125,O,0)=O,Ref(O,-1)-2,0)

Filter:
Ref(H,-1)>=Ref(HHV(H,40),-1) AND L<Ref(L,-1)-.125

Jeff Cooper Slingshots Sell

A:
Close

B:
{Range breakout}
Ref(L,-1)<=Ref(LLV(L,40),-1) AND H>Ref(H,-1)+.125

C:
{entry}
If(O<Ref(L,-1)-.125,O,0)

D:
{Stop}
If(If(O<Ref(L,-1)-.125,O,0),Ref(O,-1)+2,0)

Filter:
Ref(L,-1)<=Ref(LLV(L,40),-1) AND H>Ref(H,-1)+.125

1234's Buy

A:
Close

B:
ADX(14){The higher the better}

C:
PDI(14)>MDI(14)

D:
If(L<Ref(L,-1) and Ref(L,-1)<Ref(L,-2) and Ref(L,-2)<Ref(L,-3),1,0)

E:
{Entry}HHV(H,3)+.125

F:
{stop}LLV(L,3)

Filter:
ColB>30 and ColC and ColD=1

1234's Sell

A:
Close

B:
ADX(14){The higher the better}

C:
PDI(14)<MDI(14)

D:
If(H>Ref(H,-1) and Ref(H,-1)>Ref(H,-2) and Ref(H,-2)>Ref(H,-3),1,0)

E:
{Entry}
LLV(L,3)-.125

F:
{stop}
HHV(H,3)

Filter:
ColB>30 and ColC and ColD=1

Jim's Uptrender

Col A : CLOSE

Col B : V

Filter :

```
x:=HHV(H,60);
y:=MACD();
C > Ref(x,-1)
AND Ref(C,-1) < Ref(x,-1)
AND H = x
AND y > 0
AND y > Ref(y,-1)
AND C > Mov(C,13,W)
AND C > Mov(C,34,W)
AND V*C > 250000
```

John Hunt's Exploration

```
When(C-Mov(C,25,S),>,0) AND
When(Ref(C-Mov(C,25,S),-1),<=,0) AND
When(HHV(Mov(Ref(C-Mov(C,25,S),-1),3,S),19),<=,0) AND
When(C,<,0.8*HHV(C,260))
```

This means: when today's (close - moving average) > 0, when yesterday's (close - moving average) <= 0, when highest value of 3 day moving average of yesterday's (close - moving average) over past 19 days <= 0, and finally, when today's close < 80% of highest value of all closes for past year. (The third test is to eliminate past false breakouts.)

Last Date Exploration

COLUMN A:
Dayofmonth() {Name this column "Day"}

COLUMN B:
Month() {Name this column "Month"}

COLUMN C:
Year() {Name this column "Year"}

MACD Crosses my Trigger

MACDcustom

```
MAprd:=Input( "Periods", 5 {Minimum}, 30 {Maximum}, 14 {Default} );
YourTrig:=Mov( MACD(), MAprd, E );
MACD();
YourTrig
```

MACD Crosses my Trigger

Cola:
Name: Close
C

Colb:
Name: MACD
FML("MACDcustom , MACD")

Colc:
Name: MACDTrigger
FML("MACDcustom , YourTrig")

Filter:
Colb > Colc
{or FML("MACDcustom , MACD") > FML("MACDcustom , YourTrig") }

MACD Crossover - Buy Signal

Column A
CLOSE

Column B
MACD()

Column C
Ref(MACD(),-1)

Column D
Mov(MACD(),9,EXPONENTIAL)

Column E
Ref(Mov(MACD(),9,EXPONENTIAL),-1)

Column F
((MACD() - Mov(MACD(),9,EXPONENTIAL)) /Mov(MACD(),9,EXPONENTIAL)) * 100

Filter
Cross(MACD(), Mov(MACD(),9,EXPONENTIAL))

MACD Difference

MACD() - Mov(MACD(), 9, EXPONENTIAL)

MACD Difference Exploration

Column A
LinRegSlope(Fml("MACD Difference"), 3)

Column B
Fml("MACD Difference")

Filter
(colA > 0 AND (colB > 0 AND colB < 0.01))
OR
(colA < 0 AND (colB < 0 AND colB > -0.01))

MACD & Linia 0

ColA
MACD()

ColB
If(corss(MACD(),0),+1, If(corss(0,MACD()),-1,0))

Filter
ColB = 1 or ColB = -1

Moving Average Crossover - Bullish

Column A:
CLOSE

Column B:
Mov(CLOSE,30,EXPONENTIAL)

Column C:
((CLOSE-Mov(CLOSE,30,EXPONENTIAL)) /Mov(CLOSE,30,EXPONENTIAL)) * 100

Column D:
((CLOSE-Mov(CLOSE,10,EXPONENTIAL)) /Mov(CLOSE,10,EXPONENTIAL)) * 100

Filter:
When(colA > colB)

Negative Closes & Down Days

COL A:
BarsSince(C>Ref(C,-1)) {NUMBER OF NEG. DAYS }

COL B:
ROC(C, LastValue(BarsSince(C>Ref(C,-1))),%) {PERCENT}

NR4 Formula

Column A
Std(Log(C/Ref(C,-1)),5)/Std(Log(C/Ref(C,-1)),99)

Column B

HIGH-LOW<Ref(LLV(H-L,3),-1)

Column C
HIGH<(Ref(HIGH,-1)AND LOW>Ref(LOW,-1))

Column D
HIGH

Column E
LOW

Filter
colA<.5 AND (colB= 1 OR colC= 1)

OBV Exploration

col a:
obv()

col b:
ref(hhv(obv(),25),-1)

col c:
c

col d:
(ref(hhv(c,65,-1))*(.75)

flitr:
when(cola,>,colb) and when(colc,<,cold) and when(c,>mov(c,50,e))

Overbrought / Oversold

ob/os Summation
RSI(25) + Stoch(25,3) + Mo(25) + CCI(25)

Overbrought / Oversold

Col A:
CLOSE

Col B:
Fml("ob/os Summation")

Filter:
Fml("ob/os Summation") > 450 OR Fml("ob/os Summation") < -50

Filter enabled:
Yes

Pring's Daily KST Buy

ColA:
Name: Close

CLOSE

ColB:
Name: KST

(Mov(ROC(C,10,%),10,S)*1)+(Mov(ROC(C,15,%),10,S)*2)+

(Mov(ROC(C,20,%),10,S)*3)+(Mov(ROC(C,30,%),15,S)*4)

ColC:
Name: KST MA

Mov((Mov(ROC(C,10,%),10,S)*1)+(Mov(ROC(C,15,%),10,S)*2)+
(Mov(ROC(C,20,%),10,S)*3)+(Mov(ROC(C,30,%),15,S)*4),10,S)

ColD:
Name: KST-1

Ref((Mov(ROC(C,10,%),10,S)*1)+(Mov(ROC(C,15,%),10,S)*2)+
(Mov(ROC(C,20,%),10,S)*3)+(Mov(ROC(C,30,%),15,S)*4),-1)

ColE:
Name: MA KST-1

Ref(Mov((Mov(ROC(C,10,%),10,S)*1)+(Mov(ROC(C,15,%),10,S)*2)+
(Mov(ROC(C,20,%),10,S)*3)+(Mov(ROC(C,30,%),15,S)*4),10,S),-1)

Filter:
When(colB,>,colC)AND When(colB,<,0)AND When(colD,<,colE)

_Triple MA I Exploration

_Triple MA

```
ShortTime := 25;
MediumTime := 75;
LongTime := 200;
ShortMA := Mov(CLOSE, ShortTime, S);
MediumMA := Mov(CLOSE, MediumTime, S);
LongMA := Mov(CLOSE, LongTime, S);
ShortMA; MediumMA; LongMA;
```

_Triple MA Crossovers

```
Sma := FmlVar("_Triple MA","ShortMA");
Mma := FmlVar("_Triple MA","MediumMA");
Lma := FmlVar("_Triple MA","LongMA");
LongSignal := Cross(Sma, Mma) AND Lma > Mma;
ShortSignal := Cross(Mma, Sma) AND Lma < Mma;
```

_Triple MA Positions

```
BuyLong := FmlVar("_Triple MA Crossovers", "LongSignal");
SellShort := FmlVar("_Triple MA Crossovers", "ShortSignal");

If(
BarsSince(Ref(BuyLong,-1)) <= BarsSince(Ref(SellShort,-1)), +1,
If(
BarsSince(Ref(SellShort,-1)) <= BarsSince(Ref(BuyLong,-1)), -1,0)
);
```

_Triple MA Equity

```
Cum(
Cum(
If(
```

```
FmlVar("_Triple MA Crossovers","LongSignal")= 1,
OPEN-Ref(OPEN,-1),
If(FmlVar("_Triple MA Crossovers","ShortSignal")=-1,
-1 * OPEN-Ref(OPEN,-1),0
)
)
)
)
```

_Triple MA I Exploration

ColA: FmlVar("_Triple MA","ShortMA")

ColB: FmlVar("_Triple MA","MediumMA")

ColC: FmlVar("_Triple MA","LongMA")

ColD: ((HHV(C,250)-LLV(C,250))/LLV(C,250))*100

ColE: Fml("_Triple MA Equity")

Filter: colD > 100 AND colD < 300 AND CLOSE > 5.00

Up 20% on Double Average Volume

Col A: CLOSE

Col B: ROC(C,5,%)

Filter: ROC(C,5,%)>=20 AND Mov(V,5,S)>=(2*Ref(Mov(V,60,S),-5))

Filter enabled: Yes

Periodicity: Daily

Records required: 1300

Down 20% on Double Average Volume

Col A: CLOSE

Col B: ROC(C,5,%)

Filter: ROC(C,5,%)<=-20 AND Mov(V,5,S)>=(2*Ref(Mov(V,60,S),-5))

Filter enabled: Yes

Periodicity: Daily

Records required: 1300

Volume Based Exploration

ColA
if(V > 10*ref(V,-1),1,0)

ColB
ref(barssince(V>10*ref(V,-1)),-1)

Filter

ColA=1 and ColB>60

01_MFI/R2/Regress Slope/TSF – Short

S/C

{LinRegSlope/Close}
10000*LinRegSlope(C,34)/C

01_MFI/R2/Regress Slope/TSF - Short

Periodicity: Daily

ColumnA: R2
RSquared(C,21)

ColumnB: S/C
Fml("S/C")

ColumnC: MFI
MFI(55)

ColumnD: Mov 55
Mov(C,144,E)

Filter Enabled: Yes

Formula:

Alert(RSquared(C,21) < 0.15,13) AND
Fml("S/C") < -0.1 AND
LLV(Fml("S/C"),5) = LLV(Fml("S/C"),13) AND
LLV(MFI(55),5) = LLV(MFI(55),13) AND
LLV(Mov(C,144,E),5) = LLV(Mov(C,144,E),13)

02_ROC/TSF/ADXR/LinRegSlope Short

S/C

{LinRegSlope/Close}
10000*LinRegSlope(C,34)/C

Momentum Time

(HIGH - Mov(C,55,T)+(LOW - Mov(C,55,T)))/(HIGH - Mov(C,55,T)-(LOW - Mov(C,55,T)))

02_ROC/TSF/ADXR/LinRegSlope Short

Periodicity: Daily

ColumnA: Close
C

ColumnB: ROC

ROC(C,21,%)

ColumnC: Mov
Mov(C,144,E)

ColumnD: ADXR
ADXR(13)

ColumnE: Mov
Mov(C,55,E)

ColumnF: S/C
Fml("S/C")

Filter Enabled: Yes

Formula:

Alert(Cross(-10,ROC(C,21,%)),13) AND
LLV(Mov(C,144,E),5) = LLV(Mov(C,144,E),13) AND
ADXR(13) 21 AND
C < Mov(C,55,E) AND
Fml("S/C") < -8

03_ MT & S/C – Short

S/C

{LinRegSlope/Close}
10000*LinRegSlope(C,34)/C

Momentum Time

(HIGH - Mov(C,55,T)+(LOW - Mov(C,55,T)))/(HIGH - Mov(C,55,T)-(LOW - Mov(C,55,T)))

03_ MT & S/C - Short

Periodicity: Daily

ColumnA: Close
C

ColumnB: MT
Fml("Momentum Time")

ColumnC: Mov
Mov(C,21,T)

ColumnD: S/C
Fml("S/C")

ColumnE: LLV5
LLV(Fml("S/C"),5)

ColumnF: LLV13
LLV(Fml("S/C"),13)

Filter Enabled: Yes

Formula:

```
Alert(Cross(0,Fml("Momentum Time")),13) AND
C < Mov(C,21,T) AND
Fml("S/C") < 0 AND
LLV(Fml("S/C"),5) = LLV(Fml("S/C"),13)
```

52 Week Hi-Lo Exploration

ColA:
```
{Close}C;
```

ColB:
```
{52-week High} HighestSince(1, (DayOfMonth()=08 AND Month()=05 AND Year()=1998), H);
```

ColC:
```
{52-week Low} LowestSince(1, (DayOfMonth()=08 AND Month()=05 AND Year()=1998), L);
```

{Choose one of these filters}

Filter 1:
```
ColA >= (0.9*(ColB))
```

Filter 2:
```
ColB >= 2*ColC
```

Zero Lag EMA Exploration

ColA: Close

C

ColB: Trigger

```
If(Fml( "DS_EMA_X_MP()" )=1,H+.05,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-1)=1,Ref(H,-1)+.05,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-2)=1,Ref(H,-2)+.05,
If(Fml( "DS_EMA_X_MP()" ) =-1,L-.05,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-1)=-1,Ref(L,-1)-.05,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-2)=-1,Ref(L,-2)-.05,
0))))))
```

ColC: Signal

```
If( Fml( "DS_EMA_X_MP()" ) =1,1,
```

```
If( Fml( "DS_EMA_X_MP()" ) =-1,-1,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-1)=1,2,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-1)=-1,-2,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-2)=1,3,
If(Ref( Fml( "DS_EMA_X_MP()" ) ,-2)=-1,-3,
0))))))
```

Filter:

```
When(v,>=,500000)
AND
When( ADX(14),>,mov(adx(14),8,e))
AND
When(colC<>0)
```

52 Week Hi-Lo Exploration

```
ColA:
{Close}C;

ColB:
{52-week High} HighestSince(1, (DayOfMonth()=08 AND Month()=05 AND Year()=1998), H);

ColC:
{52-week Low} LowestSince(1, (DayOfMonth()=08 AND Month()=05 AND Year()=1998), L);

{Choose one of these filters}

Filter 1:
ColA >= (0.9*(ColB))

Filter 2:
ColB >= 2*ColC
```

Vi do' una formula Metastock per un bel pattern rialzistaVi passo la formula di un pattern di inversione rialzista che stafunzionando molto bene. Fa parte del materiale del Corso sui Pattern di Prezzo organizzato da Trading Library. Altre informazioni (demo ecc) le potete trovare qui: http://www.tradinglibrary.it/pattern/.Low-R: è un pattern di inversione rialzista che identifica un minimo di brevissimo termine dal quale può partire un movimento rialzista dal quale trarre un veloce profitto.

Ecco la formula per Metastock: è da inserire nel Expert. (basta selezionare l'opzione SYMBOL)

Ref(C,-1)<Ref(O,-1)

AND Ref(H-L,-1)=HHV(H-L,3)

AND L<Ref(L,-1)

AND C>O AND C>Ref(L,-1)

AND L =LLV(L,10)

Un esempio di una coppia di segnali rialzisti e ribassisti che ha consentito di seguire molto bene l'ultimo movimento su Pirelli.

Pubblicata da Belleli su fol il 28/08/2002 **Support and Resistance** (era gia' in elenco)

```
LookBack := Input("Look Back Periods",1,1000,10);
Resistance :=ValueWhen(1,Cross(Mov(C, LookBack,
S),C),HHV(H, LookBack));
Support :=ValueWhen(1,Cross(C,Mov(C, LookBack,
S)),LLV(L, LookBack));
Resistance;
Support;
```

Support and Resistance Levels

```
AVd:=If(CLOSE>Ref(Peak(1,H,1) ,-1),
{then}1,
{else}If(CLOSE<Ref(Trough(1,L,1),-1),
{then}-1,
{else}0));
ANv:=ValueWhen(1,AVd<>0,AVd);
SuRe:=If(ANv=-1,
{then}Peak(1,H,1),
{else}Trough(1,L,1));
SuRe;
```