



ClearStation Education: Patterns

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Patterns

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Patterns

Support and Resistance Lines

Trend Lines

Price Action

Remember searching for images in the clouds as a child?
Pictures of faces or trees...

Looking for patterns in the price action of a stock is really not much different. It's merely finding shapes on a graph that help you identify patterns in the way the price moves. Sometimes, the patterns can even predict the future action of a stock's price.

In this section, you'll learn:

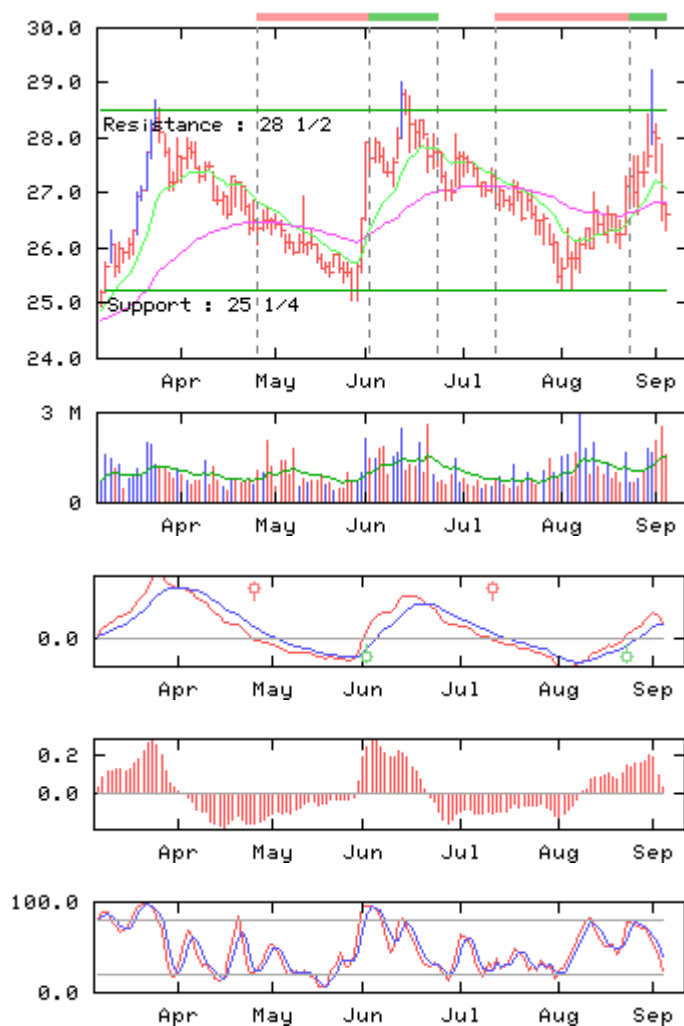
- About **support, resistance, and trend lines**
- How to use them to determine **price action**
- The significance of **gaps** in prices
- How to identify certain **patterns**

The Importance of Support and Resistance by kathia

Understanding how support and resistance lines work is important; understanding how to use them is invaluable!

Support and resistance are price levels. Support is a level that a stock's price doesn't fall below. Resistance is a level above which a stock's price cannot seem to rise. Support acts like a floor, resistance acts like a ceiling, and a stock's prices bounce between the two.

Southern Co (SO)



Does it sound complicated? It's not really. It's all about seeing patterns in the movements of a stock's price. In essence, the lines are mapping traders' buying and selling patterns. Those patterns can help predict whether trends will continue or reverse.

Depending on its strength, a support or resistance line can pause or reverse a downtrend. Its strength is determined by many factors:

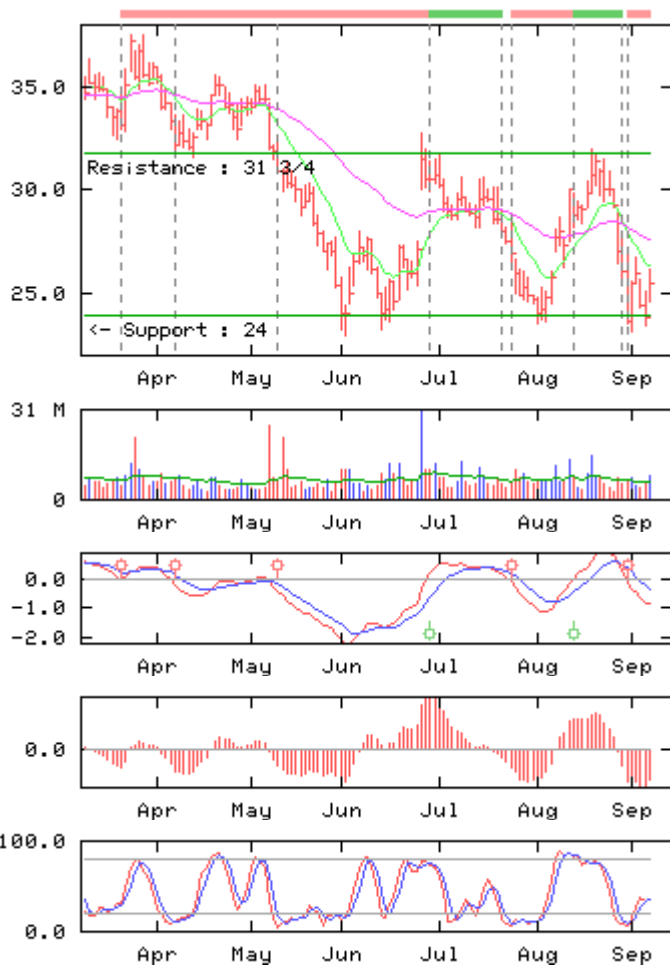
- **The length of time that it serves as a support/resistance line and the number of "hits" it has taken.** The longer the period of time, the greater the strength of the line.
- **The distance between the support and resistance line.** The farther apart the two lines are, the stronger each line is.
- **The volume of shares being traded.** The strength of the support and resistance lines increases if trading is very active while the price is bouncing between the lines.

A support line can pause a trend, but a strong support line will reverse it. A good example is SO. The downtrend that was in effect in May was sharply reversed at the end of the month as the price bounced off of the support line.

Resistance lines work in much the same way. A resistance line can pause an uptrend, and a strong one can reverse it.

Banded Support and Resistance: COMS by kensey

3Com Corp (COMS)



3Com stock has been oscillating for the past four months. Right here in early September, 3Com is sitting near historical support at 25 dollars a share.

The last three times 3Com has approached this price level, buyers have come in to push the stock higher. 3Com is technically weak right now - the trending lines of MACD are below center and as a result, a red MACD trending bar is up.

Note, however, that most of the recent MACD trending bars are ill-timed. What this means is that 3Com stock is oscillating and, therefore, is not trending. So using MACD to time trading decisions would be an ill-advised.

Instead, you should use stochastic to time your trading decisions. You will note that whenever 3Com stock touches the support line at 24, stochastic is oversold. In addition, when prices touch the resistance line at 31 3/4, stochastic is overbought. So, you want to buy the stock when the stochastic lines cross over the lower reference line and sell the stock (or go short) when the stochastic lines cross below the upper reference line.

At the right-most edge of the graph, the stochastic lines are crossing over the lower reference line so you would want to look to buy the stock even though we are in MACD red.

If a trade is placed at this price level, a stop should be used in case prices fail to rise and the lower support line is pierced. As you can see at the left edge of the graph, prices crossed below the resistance line at 31 3/4 (at that time it was a support line), and it has not made it back over that line since. Same case here. If 3Com drops below support at 24, that line will probably serve as a resistance line in the future.

Breaking Below Support: AVEI by kensey

Arterial Vascular Engineering (AVEI)



June 6, 1998

Ever since AVEI broke below support at 33, there has been continued weakness in the stock. It has been below its 13-day EMA, and the damage underneath the MACD red trending bar continues to mount.

When a stock breaks below established support, it can be expected to act as a resistance line. In other words, once a price breaks below a support line, it flips its role and becomes a resistance line.

So, I would look to be a seller if prices were able to rally back and approach this line. Given that the stock is at 30 as I am penning this article, this increasingly seems unlikely, and I am eyeballing the next support line for this stock, which appears to be at 25.

Eyeballing support and resistance lines is worthwhile. ClearStation allows you to annotate graphs with your own lines that are not visible to other users unless you recommend the stock. There is an action item called "Annotate" that can be found when you are viewing any stock.

Banded Support and Resistance: ASAI by kensey

ASA Holdings Inc (ASAI)



What are the funny horizontal green lines on the ASA Holdings (ASAI) price graph? They are called "banded support and resistance lines." They are included to help you gauge clearly the price action of a given stock.

For ASAI, the middle line is drawn at 40 1/2. This is a resistance line. When prices approach it, it resists further advances. The lower line is drawn in at approximately 36. This is a support line. When prices approach it, it acts to support prices and ward off further declines.

For the past four months, prices have oscillated between these two lines. At 40 1/2, sellers appeared and prices were forced back down. At 36, buyers stepped in and prices were forced back up. It has been a battle of two equal and opposing forces. These lines help to illustrate important facets of crowd behavior among traders, namely that their activity often follows predictable patterns.

So what do these lines mean in relation to broader market forces?

It is helpful to examine this stock in terms of the overall "strength of the domestic economy." The only reason the DOW has declined by only three percent from its top, and the broader based S&P 500 has declined only four percent from its top is the current state of the US economy. Growth is strong, interest rates remain low, and inflation is nonexistent. Add to this equation the recent decline in oil prices, and you have an environment in which this particular small airline carrier can prosper.

Who cares?

I do! ASAI has broken above resistance at 40 1/2. This suggests the dawn of a new era and the possibility that resistance at 40 1/2 may soon become support at 40 1/2. In other words, it's role-reversal time. This is typical once a historic level is crossed (in either direction). So if ASAI is not able to hold above the newly crowned support line at 40 1/2, then all bets are off.

Staircasing: PIXR by kensey

Pixar Inc (PIXR)



June 16, 1998

Pixar, besides having a really cool corporate name, lives its life in a most interesting manner of periodicity. It's a classic stair climber that uses 8 point steps. This is illustrated with some annotated lines on the price graph.

Both of these lines represent resistance lines. The price touched these lines a number of times before breaking through and, in the process, gave the stock a higher altitude in which to live.

Pixar shot up today by 3 points to close at 47 1/2. For the past 6 weeks it had been leveling at 44 dollars a share. Before that, it spent about 6 weeks leveling at 36 dollars a share. The MACD graph captures this quite well. Once the Pixarian foot lands on the next stair, it starts a gradual ascent down. Once the foot is ready to go up again, it starts to arc back up. Right now, it is starting to arc back up, similar in manner and form to the prior two steps. Some other ducks: a 52-week price high was hit, the volume was totally there, and the close was right at the high of the day.

So, if things go as expected, we are looking for an ascent to somewhere in the low 50's. If the next step is missed, this will mean a price break below 44. That's the signal for action, before a fall down the stairs is taken. 44 dollars a share.

Descending Triangle: IDTC by kensey

IDT Corporation (IDTC)



Between April and August, IDTC was caught in what we call a "descending triangle". This is a geometric abstraction of a region in which prices have been effectively contained. That is, prices have been trapped inside and are looking for a way out.

A descending triangle is composed of two lines (the third side is open).

One line is the horizontal support line (drawn in at 24 1/4). As prices move lower and reach the price level at which this line is drawn, they reverse and turn higher. This barrier becomes more formidable each time it bounces prices.

The second line in this configuration is a trendline that represents a cap on prices. As prices hit this line, they bounce off and move lower. The trendline has a downward slope that reflects the stock's descending price level (at which IDTC has been peaking in its failed rally attempts).

Simply put, prices reach the support line at 24 dollars a share. They then bounce upward off this line. The price at which IDTC has been able to rally after the bounce is getting progressively lower and lower. This forms the triangle.

As prices near the apex of the triangle, the vertical range in which they are confined gets narrower. Pressure builds up and a potentially explosive flash point is created. It is here that prices escape the triangle, which usually happens quite violently and decisively.

Remember: you should trade in whichever direction the stock escapes the triangle.

In this case, prices broke the support line in early August. Subsequently, a solid week silently passed by in which there was a window to get a decent fill on a short trade. As is typical when a descending triangle is broken on the downside, prices bumped against the support line from underneath it before finally breaking down. In this case, there was an 8-point drop in less than two weeks.

Descending Triangle: CCR by kensey

Countrywide Cr Inds Inc (CCR)



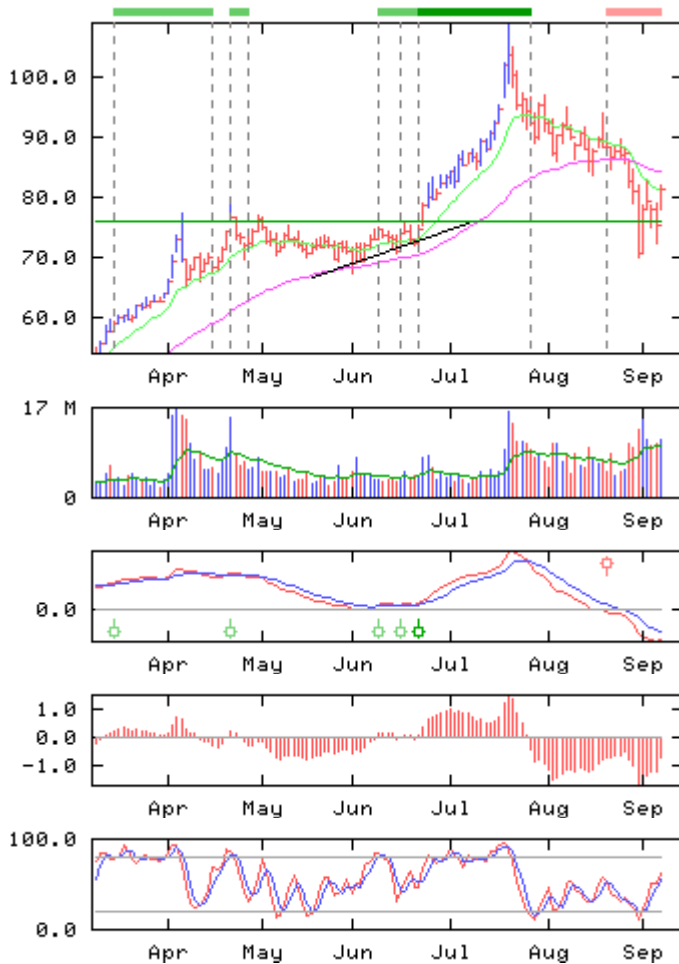
Countrywide broke out on the upside of a descending triangle in the beginning of June. This happened only a few days before a green MACD trending bar was put up, so this event served as a very timely heads-up.

The uptrend from that point on was remarkably consistent, as shown by the persistent strength in stochastic and the even spacing between the MACD lines as they work up toward the top of that indicator graph.

It is interesting to note that after Countrywide went into a bear trend (as indicated by the start of a red MACD trending bar in late July), prices hovered underneath the support line drawn in at 45 in mid-August. It was mostly a guessing game until the drop started in late August and shaved off 10 quick points. The only warning was that one day when prices nosed above the support line intraday but weren't able to hold that level.

Ascending Triangle: LU by kensey

Lucent Technologies Inc (LU)



In the beginning of June, Lucent entered an ascending triangle configuration. This pattern usually indicates a consolidation, and should be watched closely: the way it breaks offers a clear signal on how to trade.

An ascending triangle is composed of two lines. One is the horizontal resistance line (drawn in at approximately 76). As prices move higher and kiss the price level at which this line is drawn, they reverse course. This barrier becomes more formidable each time it bounces prices.

The second line in this configuration is a trendline that represents a floor. As prices hit this line, they bounce and move higher. The trendline has an upward slope that reflects Lucent's progressively higher price levels.

As prices near the apex of the triangle, the vertical range in which prices are confined gets narrower. Pressure builds up, as if a coil of a spring is slowly being compressed. The closer prices get to the apex, the higher the pressure. You can see that when prices escape the triangle on the upside, volume increases. There is no more hesitancy in price action as prices rapidly escalate from the mid-70's all the way to over 100 dollars a share.

Pennant: CPQ by kensey

Between February and July, Compaq Computer formed a very clear pennant. A pennant is a consolidation pattern in which the probable direction of future prices is clearly indicated.

Before the advent of computers, consolidation patterns were delineated with lines hand drawn on graphs, and even then, these lines were considered dependable. ClearStation offered annotation as of one of its first features so members could outline consolidation patterns as soon as they spotted them.

A pennant is formed by two trendlines - one that slopes down and one that slopes up. The angle of both lines should be equal. These lines pinch prices into the apex and create an inflexion point where a determination is made as to which trendline has staying power.

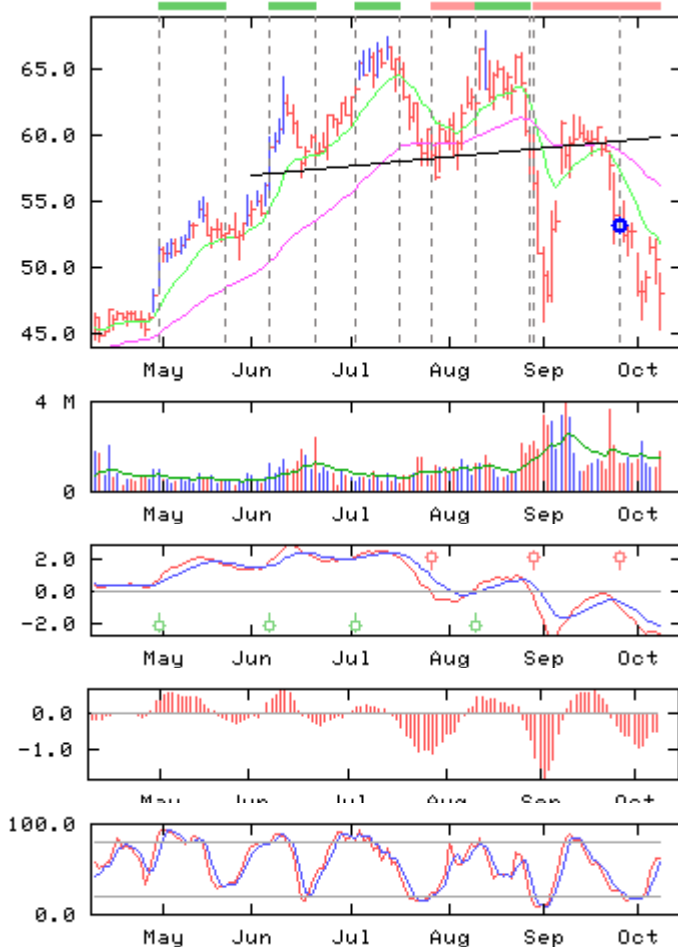
Compaq Computer Corp. (CPQ)



You will note here that volume in June dries up as prices approach the apex but increases substantially in early July when the upper trendline is decisively crossed. Without an accompanying pickup in volume, the exit of the pennant formation might be a false breakout.

Head-and-Shoulders Top: GPS by kensey

Gap Inc. (GPS)



The head-and-shoulders top is a tenet of classical charting theory, one invented when trading off price action was accomplished using pencils and rulers.

It suggests that buying in a bull move is composed of three waves - smart money, dumb money and dumber money. Underneath each of these waves is drawn a 'neck-line', which represents the approximate points at which prices fade off the peak of each wave. Such a line is drawn on the price graph at left.

Wave 1 consists of smart money and forms the left shoulder, encapsulated by the MACD green trending bar of June. It represents the activity of a syndicate of buyers operating 'in secret', quietly accumulating shares. These buyers have a 'real reason' to pick up shares, one derived from research. These buyers are not momentum investors (as at this point there has not been enough momentum to attract their attention).

Wave 2 consists of dumb money and forms the head. These buyers missed the first big move up, the strength of which attracted their attention in the first place. They take advantage of the fade in prices off the peak of the left shoulder and use it to aggressively accumulate shares. The move up caused by this wave of buying is encapsulated in the MACD green trending bar in early July.

It is during the fade off the top of wave 2 that the syndicates responsible for the first leg up start to unload shares. Since they have been vested in the stock from the beginning, they recognize when things are getting 'frothy' and are scared by the frantic buying of the momentum crowd (who are more concerned with missing 'the next big thing'). It's sort of like the end of a party where all the suits have gone home and you are left with a bunch of milling drunks. Prices fade back to the neckline.

Wave 3 consists of dumber money and forms the right shoulder. This last group of buyers missed both waves 1 and 2 and looked at the fade in prices as yet another buying opportunity. These investors consist of both new money and those who entered positions late in the second wave and are thus sitting on paper losses. The volume in wave 3 is typically weaker than that forming the head and the left shoulder. So the rise in prices here is short lived due to the fact that it is even less grounded than the rise that formed the head.

Once prices fade off the right shoulder, the formation is confirmed when prices break below the neckline. This happened rather dramatically in the end of August when Gap shares plunged into the upper 40's.

This move was exacerbated by the decline in the broad market, and was actually somewhat 'out of the formation' move.

As is typical with such formations, prices come up from beneath the neckline and touch it. In this case prices swung over the neckline and just sat there for a week. Look at it! Guess the next move! This is where the short hammer is dropped.

Sounds like a lot of work, right? Wrong. This formation is so predictable that when a really good one is found (as you can see, there are a lot of conditions that must prevail for it exist fully) you are looking at a chance to trade with a high degree of success and a low amount of risk.

Actually, any stock where prices cup when a red MACD trending bar is above the price graph is usually a good opportunities for short trade. Speaking of MACD, notice how the rounded peaks of the lines get lower and lower on that indicator graph? This confirms and encapsulates all of the above.

The book that covers this Head-and-Shoulders formation (and others) is called Technical Analysis of Stock Trends by Robert D. Edwards and John Magee. This book is **a must**.

Gap Down in Prices: MSPG by kensley

MindSpring Enterprises (MSPG)



The support line at \$26 dollars is a very important line for MindSpring shares. This line has history; it is the single most important line on the chart of this stock. 26 marks the low that was reached in August and September during the anomalous retreats of the broad market. 26 marks the high back in April. 26 marks the point level through which the stock gapped up in mid-June and then doubled.

The issue facing MindSpring shares is a Gap Down in prices at the extreme right edge of this chart. This happened during the high-volume down day in the first week of October (and coincided with the advent of a red trending bar). A pair of short lines is drawn onto the price graph to represent the Gap Down.

The gap exists because shares did not trade in the range the gap represents (which is $31 \frac{1}{2}$ - $32 \frac{3}{4}$). Shares closed the previous day above the gap, and the next day the range of trade was entirely below.

Gaps only occur on daily charts in reaction to negative news reported while the market is closed. Had the "event" that caused the gap happened while the market was open, you would see an unusually wide range of intraday prices, but no gap.

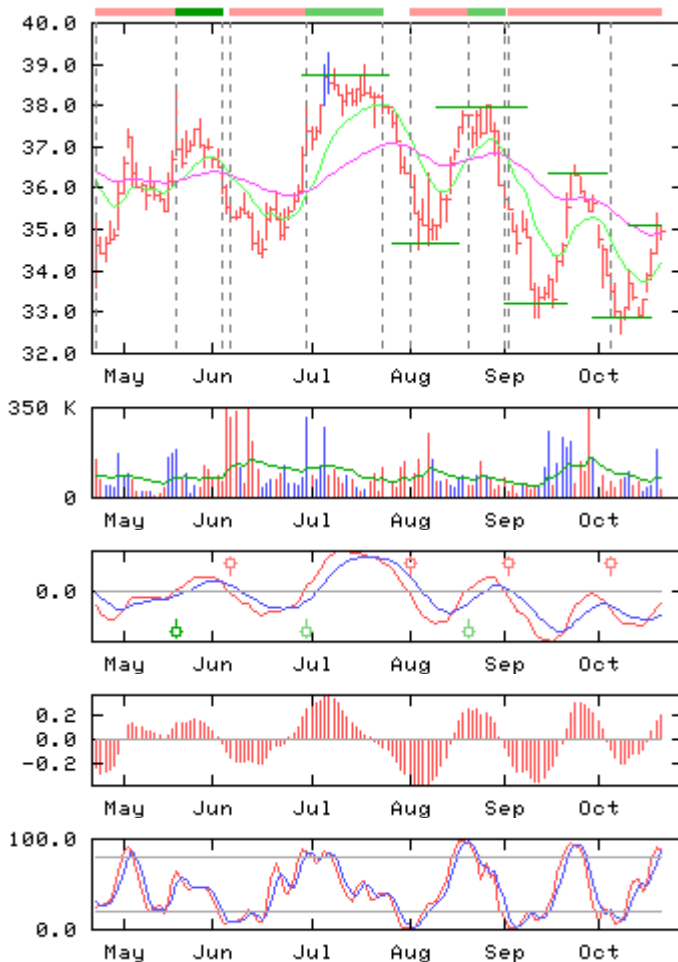
Gaps are caused by an imbalance of buy and sell orders. In the case of a Gap Down, a large number of sell orders (or one huge sell order) placed overnight have to be cleared before the stock can start trading. So the stock gets marked down until the large block being sold by the seller has found a buyer. If the news is especially bad, the gap is proportionately larger.

The price level through which prices gapped down usually becomes a point of future resistance. If prices start to recover and return to the price level of the gap, they tend to get pushed back down. On the other hand, it is bullish if prices are able to cross over the gap (at which point it tends to become an area of support).

But it usually takes a couple of tries. In almost all cases, the first attempt gets pushed back. This is, in fact, what happened to MindSpring: right after shares gapped down and reached support at 26, they bounced up, but only got as far as the gap before they were pushed back down.

Downtrend in Prices: GGP by kensey

General Growth Pptys Inc (GGP)



General Growth Properties (GGP) is in a classic downtrend. In a downtrend, each decline in prices falls to a lower low than the preceding decline and each rally stops at a lower point than the previous rally.

In a nutshell, a downtrend consists of lower lows and lower highs.

Stocks rarely go straight down, but descend in a series of downturns.

The biggest hint that a stock is in a long-term downtrend (this one is going on 4 months) is the fact that most of the MACD trending bars on top of the graph are red. The green trending bar that occurred in mid-August was a head-fake. You can tell that this bar is suspect because prices at the point when the bar went up are lower than the peak in prices in July.

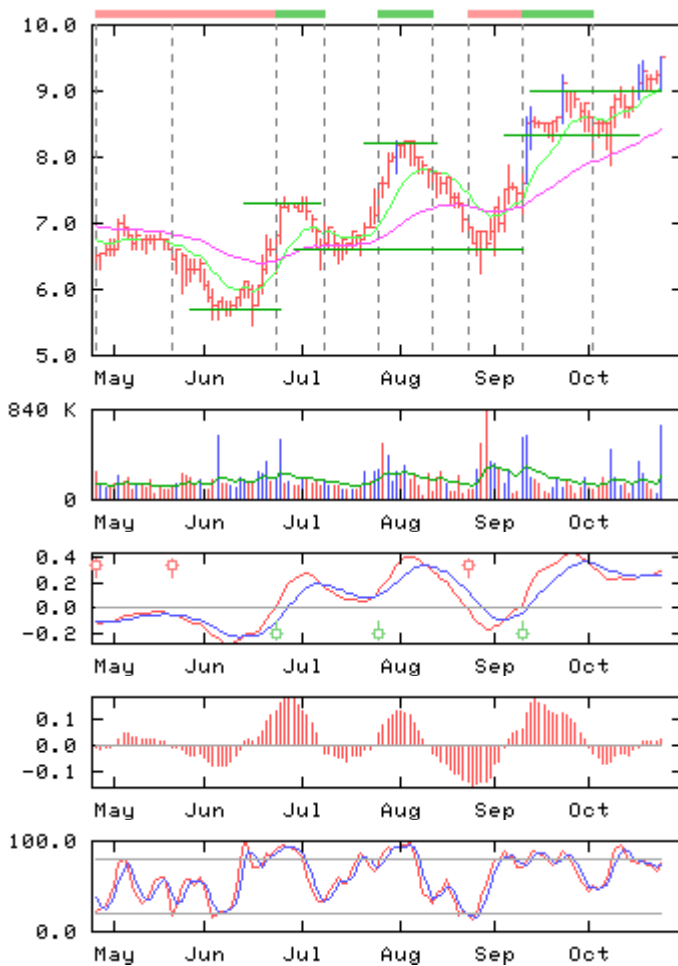
You need to pay attention to where a stock peaks. If a green bar goes up and prices are at a lower high than the prior peak, I usually wait to see how the stock acts on a fade. If that fade arrests itself and green is able to persist, then I'll consider the buying the stock.

Note the stochastic indicator graph on the bottom. It accurately predicts the fall and rise of prices. When the stochastic lines cross below the upper reference line (exit an overbought condition), prices tend to fall. When they cross above the lower reference line (exiting an oversold condition), prices tend to rise. Stochastic is covered in detail in another section, but note this for the record.

The MACD indicator graph is the third from the bottom. It traces curves that sink lower and lower down as the downtrend persists. This points out the stock is weakening. MACD is also covered elsewhere, but note this for the record too!

Uptrend in Prices: PLP by kensey

Phosphate Resource Partners Lp (PLP)



An uptrend in prices is a series of higher highs and higher lows. It's that simple.

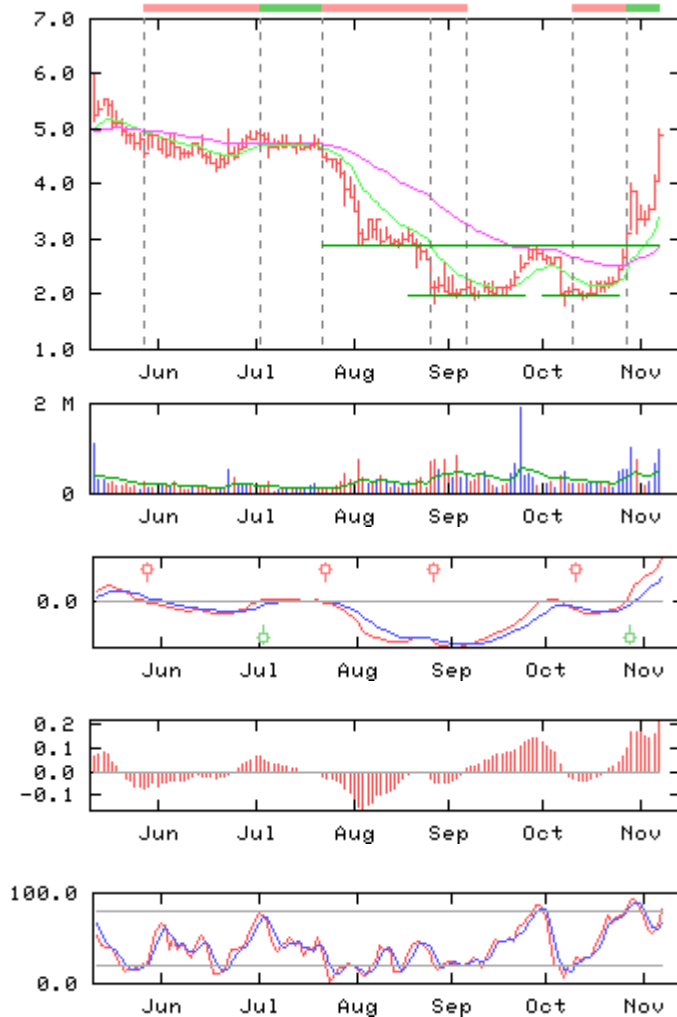
In the price graph of PLP, each high takes prices to a higher price level than the preceding high, and each fade in prices arrests itself at a higher price level than the preceding low.

In addition, volume accelerates when prices are climbing, and shrinks when they drop. This is shown on the volume indicator graph by blue volume bars that stack higher than red volume bars.

In late August, the fade in prices off the early August peak brings prices down to a price level equivalent to the one that marked the prior low in early July. This is ok. As long as prices do not close lower than the preceding low, the stock is still considered to be in an uptrend.

Double Bottom: XOMA by kensey

Xoma Corp (XOMA)



Trade in Xoma Corp (XOMA) is taking a turn for the bullish in the form of heavy buying that is stacking the deck of the volume indicator graph.

A recent double bottom marks the reversal from a long-term downtrend to a budding uptrend. In early September, XOMA bottomed out at 2 dollars a share and skidded horizontally at this price level for a couple of weeks as volume dropped off to near nil. The end of September saw strong buying come in a wave that quickly elevated the stock to 3 dollars a share. Shares then dropped back to 2 dollars a share in early October but this occurred on lower volume. In particular, the selling that brought the stock to 2 dollars a share the second time around was less than the volume that brought the stock to this level the first time around. Volume here was also less than it was during the buying binge that came in between.

The lift-off from the second retest at 2 in mid October marks the exit from the double bottom reversal pattern and the beginning of a new trend.

The requirements for a double bottom chart pattern are:

- Step 1 - The formation of a low
- Step 2 - A lift-off from this low that occurs on higher volume than in step 1.
- Step 3 - A retest of the low made in step 1. The volume in this part of the move is lower than that of steps 1 and 2.
- Step 4 - A lift-off from the second low that occurs on volume that is greater the selling volume in steps 1 and 3.

As you can see, comparing the relative volume in each of these four waves is important. ClearStation graphs help you in this effort by color-coding the volume indicator graph. Up volume is drawn in blue and down volume is drawn in red. So steps 1 through 4 require you only to eyeball the height of each of these four stacks.

In volume terms, the above steps can be boiled down to:

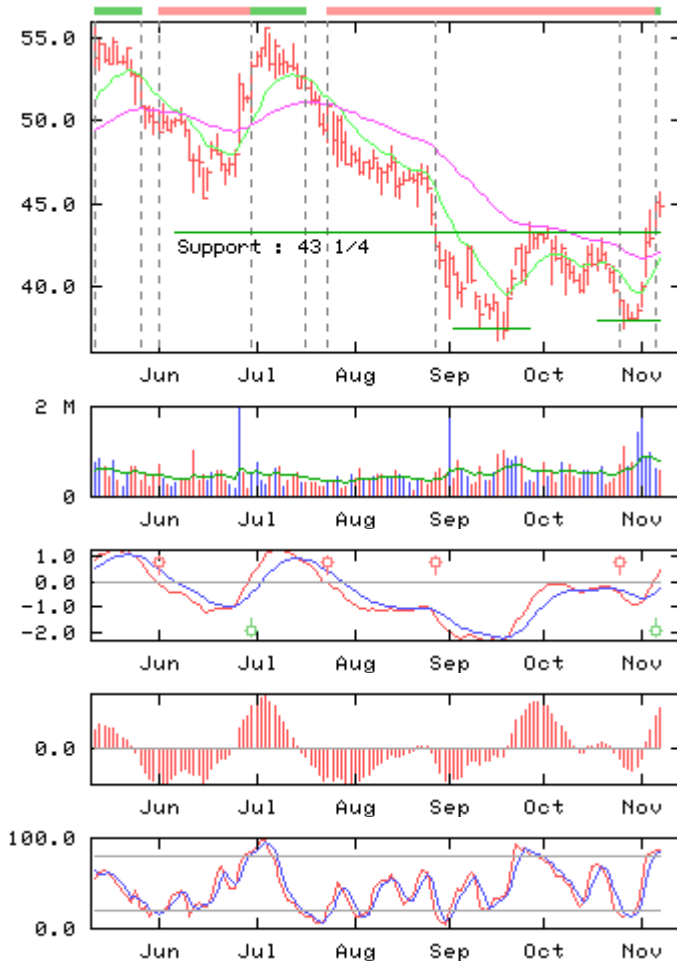
1. Step 1 - big red stack
2. Step 2 - bigger blue stack
3. Step 3 - smallish red stack

4. Step 4 - big blue stack

Even though shares are extended here far above the low at 2, the return to bull trend is the reason to consider them now. Also, shares are lifting off today from a consolidation at 3 and change.

Double Bottom: UK by kensey

Union Carbide (UK)



Trade in Union Carbide (UK) is taking a turn for the bullish in the form of heavy buying that is stacking the deck of the volume indicator graph. This volume is coming as the stock makes an exit from a variation on a classic double bottom.

A double bottom is a reversal pattern (a change in trend depicted on the graph). In this case, the trend has changed from long and persistent downtrend to budding and suggestive uptrend.

Perhaps the facet of the market I liked best in early October was the sight of double bottoms sprinkled all over the ground as drops of sweat was wrung from the brows of fund managers during market retreat stage 2. In the case of Union Carbide it phase-shifted right by a few weeks and so still offers up a trade on the long side if you **love the Chemicals group**.

Prices skidded to 38 in mid September. The end of September saw strong buying come in a wave that quickly elevated the stock to 43 dollars a share. Shares then dropped back to 38 dollars a share in early October, but this occurred on thin volume.

The lift-off from the second retest of 38 at the end of October marks the exit from the double bottom reversal pattern and the beginning of a new trend.

To recap, the requirements for a double bottom chart pattern are:

- Step 1 - The formation of a low
- Step 2 - A lift-off from this low that occurs on higher volume than in step 1.
- Step 3 - A retest of the low made in step 1. The volume in this part of the move is lower than that of steps 1 and 2.
- Step 4 - A lift-off from the second low that occurs on volume that is greater the selling volume in steps 1 and 3 with prices exceeding the high made in step 2.

As you can see, comparing the relative volume in each of these four waves is important. ClearStation graphs help you in this effort by color coding the volume indicator graph. Up volume is drawn in blue and down volume is drawn in red. So steps 1 through 4 require you only to eyeball the height of each of these four stacks.

In volume terms, the above steps can be boiled down to:

1. Step 1 - big red stack
2. Step 2 - bigger blue stack
3. Step 3 - smallish red stack
4. Step 4 - big blue stack

In other action around the world, Natures Bounty (NBTY) looks interesting here. It is in a short-term uptrend and the volume indicator graphs suggests that the downturn from 25 to 5 has run its course.