THE ULTIMATE GUIDE TO TRADING OPTIONS
“Deratives are weapons of mass destruction.”
- Warren Buffet in Berkshire’s 2002 Annual Letter

Warren Buffet Set to Make $2 Billion by Exercising Goldman Sachs Put Options - Forbes 2011

Welcome to the wonderful world of options. Where everyone has an opinion that seems suited to serve their self interest.

We’ve all heard how options are complicated, risky and the markets are rigged with professionals using all types of tricks for ripping off the “little guy.” Heck, even good old folksy Warren Buffet talks out of both sides of his mouth.

I want to strip away the rhetoric, remove the myths and show how used properly options are powerful tool for making money and reducing risk.

I’ve spent over two decades trading for a living, including six year in the “pits” as a market maker member of Chicago Board of Options Exchange. The the playing field has not only been leveled, it is tilted in favor of educated individual investor

There has never been a better time for the average individual to profit from options.

• Electronic trading has reduced transactions costs.
• Dual listings on multiple exchanges the move to penny pricing has narrowed bid/ask spreads. The proliferations of products from ETFs to weekly options provides the ability to mimic sophisticated hedge funds at fraction of the cost.
• The internet in offers access to real time data and research and more research than you could ever hope to read in a lifetime.
I saw these changes coming first hand and actually started to feel at a disadvantage being stuck on the floor as a “specialist”, scalping in just a few stock options. As an market maker I made a lot of small profits facilitating trades with no care or clue about the underlying security. I was making a nice living, especially for a single guy in his 20s, but I wasn’t really harnessing power of options.

I knew the real money was to be made through a combination using leverage to directional moves on larger time frames while getting the odds in my favor through the tailwind of time decay. So I left the CBOE in 1997 to take my hands-on option experience “upstairs” and use the greater access to information and apply it to bigger picture strategies.

I’ll be honest, the transition was tough and I barely made any money over the next few years. This was especially painful as it seemed everyone was whooping it up and getting rich during the dot.com bubble. It looked like I had made a huge mistake leaving a lucrative and fun filled occupation of day trading just when the party was getting started. I didn’t understand the run up in value for companies making no money. And now the market makers I had once been one of were my enemy. How dare they rip me off with those wide bid/ask spreads!

But I hunkered down, did a lot research and focused on technical analysis. I streamlined my process, waited for the opportunities offering the best probability and analyzed which strategy would maximize profits. This guide will introduce you to those 3Ps.

Ultimately my decision and work paid off. It’s not just my income that increased, but my lifestyle improved. I get to spend as much time with my young children as all of us can stand. Also, my work conditions have vastly improved. I’ll take the ocean view of my home office over being squished by large sweaty men screaming in my ear any day. The fact most exchanges
eventually closed down as they shifted to electronic platforms also offered some vindication. At this point even the venerable New York Stock Exchange is little more than a TV studio backdrop.

Anyone with an understanding of the basic concepts and employing straightforward strategies can use this 3P approach to options to produce steady profits with limited risk.

This isn’t to say it’s easy. The only thing guaranteed is you will experience some losses. One “P” I try to avoid is making predictions. In trading there are external forces we cannot control. How many people predicted crude oil would be trading below $45 a barrel this year? And once it got there everyone was convinced it was going to $30, when in fact it jumped back to $60 within two months.

Successful trading is not about making good predictions. It is about making good decisions.

Winning traders do not have a crystal ball as to how the future will unfold. Instead they gather information and data, and become aware of various scenarios. Then they use new information to make logical decisions as scenarios confirm or disconfirm.
Options, through leverage, limit risk and offer the ability to customize strategies aligning my investment thesis with the market environment, allowing me to exert control and get the odds of profitability in my favor.

The main thing I’ve learned through my 25 years as a professional option trader is there are no short cuts to success. No tricks, no secret formulas. It takes time, research, repetition and discipline. This does not mean trading options needs to be complicated, or requires your full time attention to achieve a level of consistent profitability.

Let’s start at the beginning:

**The Option Contract**

We use the term "option contract" for a reason. Options transaction is literally a binding contract between the buyer and seller. Contracts come in two forms: puts and calls.

A call option gives the buyer the right, but not the obligation, to buy shares in a security at a specified price (known as the strike price) within a given time frame that ends on a specific date (which we call the expiration date).

On the other side of the trade, the seller of the call option has the obligation to sell said security at the specified strike price within the time frame. In a standard option, each contract represents 100 shares of the underlying equity. This ability to control 100 shares for a fraction of the cost of actual ownership is what gives options leverage. The 100 multiplier is reflected in how option price are quoted; a call priced at $2.00 per contract costs $200 to purchase.

If the call owner decides to purchase the underlying shares, we say they are "exercising" their right to do so. If the call writer is forced to sell shares, they are being "assigned" their obligation.
A put option gives the buyer the right to sell shares at a specified strike price prior to the expiration date. And on the other side, the seller of a put option has the obligation to purchase shares at the strike price prior to the expiration date.

**Options Come with Premiums**

It is interesting to note quite a bit of options terminology overlaps with that of the insurance industry. An option's price or value is referred to as its premium (like an insurance premium). The purchaser of an option has losses limited to the amount of the premium. The seller of an option is regarded as a writer (like an insurance underwriter). And an option's expiration date is analogous to a term insurance policy.

Options with intrinsic value are said to be "in-the-money", while those strikes above the current stock price and whose value is solely extrinsic are said to be "out-of-the-money".

For example, Apple (AAPL), with shares trading at $125 a call option with the $120 strike would be $5 in-the-money, and therefore have $5 of intrinsic value. The owner of such a call has the right to purchase shares at $120 a contract. A call with a $130 strike is $5 out-of-the-money and therefore it’s value all “extrinsic” and is comprised of time and implied volatility.

Let’s bring the two concepts of leverage and premiums together. Sticking with Apple (AAPL), trading at $125 share it would cost or require $12,500 to purchase 100 shares.

On the other hand, one could by a call option with a $120 strike that has 6 months until expiration for $10 per contract. The call currently has $5 of
intrinsic value and $5 of extrinsic value. The owner of that call has the right to buy shares at $120 but she paid $10, meaning shares of Apple need to be above $130 at the expiration date for a profit to be realized. Of course, profit can be taken at any point prior to expiration.

Assume shares of Apple rallied to $135 over the next three months. The call option would then be worth approximately $19, as it would have $15 of intrinsic value and $4 of time premium.

**The owner of the call could realize a $9 or 90% profit on just an 8% increase in the stock price. That is the power of leverage.**

On the other hand, if Apple shares declined the losses to the call owner would be limited to the price paid, or $1,000, no matter how far the shares fall. Understand this does represent a 100% loss. The owner of the stock has the full $12,500 at risk on the very unlikely but theoretically possible chance shares fall to zero.

The seller of that $120 call stands to make or collect the full $1,000 of premium if shares declined below $120 by expiration. The seller actually would make money even if shares rose slightly; i.e. if Apple were at $128 at expiration the call would be worth $800 and the seller would realize a $200 profit even as shares. But it’s important to note the seller of the call would face theoretically unlimited losses if Apple shares rallied to infinity and beyond.

Understanding how option prices behave will allow us to control our risk, choose appropriate strategies and target realistic profits. Let’s look at the terms used to describe and measure changes in an options value.
Meet The Greeks

The “greeks” are the terms used to how various elements impact the price of an option.

**Delta**: is the expected change in an option's price for every $1 move in the price of the underlying stock. Delta can range from 0.00 to 1.00, with calls being expressed as a positive number and puts as a negative number. The rule of thumb is an at-the-money option has a delta of 0.50.

It is very important to understand delta is not fixed. It is a function of the underlying stock price and the time remaining until expiration. As an option moves further into-the-money and time decays, the delta increases at an accelerated rate. Conversely, as an option moves further out-of-the-money and has more time remaining, delta decreases at a slower rate.
A valuable feature of owning options is that your profits will accelerate as price moves in your direction and losses will decelerate relative to the stock as price moves against you - so profits can pile up faster than losses.

Going back to the Apple example, with shares at $125 the call with a $120 strike has a delta of 0.70, meaning each contract is the equivalent to being long 70 shares at that moment in time and price. As share price rises the delta will increase until it matches the equivalent of owning 100 shares.

Another important reason to understand delta is it will help you with the right sizing of your position and managing risk. There are two basic ways to size a position, on a share basis or a delta equivalent. On a share basis you would buy 1 call for each 100 shares you ultimately want to “control” if the option moves into-the-money. On a delta equivalent basis you might wish to have a position starting as if it is long 100 shares right from the beginning. For example you might buy 2 at-the-money calls which each have a 0.50 delta. Ultimately, if this position moves into the money it will come to represent 200 shares.

You never want to establish an option position on a dollar equivalent basis to the stock position. In Apple, if you spent $12,500 to buy 100 shares you would never buy $12,500 worth of calls. In our example that would be 12 contracts, representing 12,000 shares!

**Theta** is the expected percentage change in an option's price for a one-unit change in time. Options are a decaying asset in that their value decreases as time passes.

Theta, or time decay, is not influenced by any of the other variables, but it is defined on slope. That is, it accelerates as expiration approaches.
This can work in your favor if you are short an option, or against you if you are long an option. But note there are some subtleties of whether the option is in-or-out of the money, which need to be considered, especially when using spreads.
This goes a bit beyond the scope of this introductory guide but it’s good to be aware.

**Vega** is the expected change in an option's value for a one-unit move in implied volatility. Again, the strict formula is defined as a 1% move, but for practical purposes it will typically be expressed in dollars per one-point move. For example, the Apple 4120 call currently implied volatility of 25% and a vega of 0.30. If implied, volatility increased to 26% the value of the call would increase from by 30c to $10.30, even if the underlying share price didn’t change.

We’ll have deeper dive into volatility in moment.

We’ll end with a quick look at the last two Greeks.

**Gamma** is the rate of change in an option's delta for every one-unit change in the price of the underlying. As such, it is a derivative of a derivative (a second derivative) and moves in miniscule increments. This
can be an important tool for gauging how quickly a long call position gets longer as price rises. Remember our delta equivalent Apple position of 2 at-the-money calls? That position has a positive gamma.

**Rho** is the expected change in an option's price for every one-unit change in interest rates. With rates near zero and not going much higher for the foreseeable future, this will not have much of an impact on options pricing.
Volatility: Implied vs. Historical

The insurance analogy referenced earlier plays a large part the pricing of an option.

It costs more to insure a house sitting on a fault line in San Francisco, or in tornado alley of Oklahoma, than one in leafy Vermont.

The same is true for stocks. For this reason the options on a biotech stock whose fortunes rest on a single drug will be more expensive than a utility company that has a steady, predictable earnings stream. This is expressed through different implied volatility levels.

Implied volatility remains the key to answering the number-one question on an option trader’s mind:

Is this option “cheap” or “expensive”?

One of the keys to successful options trading is judging whether an option is fairly priced.

The most commonly used apparatus for valuing options is the Black-Scholes model, which considers 5 factors in calculating a particular option’s theoretical fair value:

1. The price of the underlying security
2. The strike price
3. The time, or expiration date of the option
4. Interest rates
5. Implied volatility

The first four inputs are known variables. To get number five, we plug those four inputs into the Black-Scholes model. This would give us the
“theoretical” implied volatility, which helps us decide whether an option is cheap or expensive. In this sense IV is the “answer” to our question.

But given that options trade regularly, there is already an “actual” implied volatility assigned to each option based on its price, which is constantly updating in real-time. Therefore, our mission is to determine whether an option's current price looks cheap or expensive based on its volatility level.

Implied volatility is a measure of the probability of a certain percentage price move occurring within a given time frame. It is typically anchored to the underlying stock’s historical or realized volatility, which measures recent price action.

Historical volatility as based on a stock’s past price action and is therefore backward looking.

Implied volatility is a measure of the expected or future price move and is therefore forward looking.

Implied volatility and historical volatility both tend to be mean reverting. But there are a variety of factors that can drive them to extreme levels at any moment of time. The most obvious and predictable is tied known events such as an earnings report. Look at the pattern of IV vs HV in Amazon.
Can you guess which dates it reported earnings? You can see that implied volatility inflates dramatically even as historical volatility remains low. Then once the news is out IV collapses even as HV jumps.

An increase in implied volatility ahead of an event is simply the expression of a higher probability of a larger-than-usual price move within a given time frame. In this sense, an increase in implied volatility is an artificial expansion of time. In other words, what could happen over a long period of time is now being priced into a shorter period of time, which makes sense ahead of a volatility-inducing earnings report.

Understanding where IV stands relative to HV, and why it is at the current level, is crucial to assessing current option prices, and anticipating future moves.

One of the most common complaints and reasons for people losing money in options is failing to understand or account for the impact changes in implied volatility can have on an option’s value.
Just as it isn't necessary to know how to build an engine to drive a car, you don't need to know the entire math behind the pricing of an option. But it certainly helps to understand the concepts that make them stop and go. And with experience, they'll safely take you where you want to go.

A great site providing both volatility data whilst allowing you to plug in changes in various inputs such as price, time and implied volatility is http://www.ivolatility.com/home.
Measuring Returns

It’s almost time to start looking at ways we will make money. But first I want to explore how returns should be calculated, whether it is possible to achieve both a high percentage win rate along with high percentage returns and finally which option strategies offer the best probability of consistent profitability.

It’s a well known investment maxim risk is correlated to reward. But when it comes to options it seems people are often making claims to both consistently hitting singles while simultaneously being home run kings.

First we need to be clear on our terms. Returns must be based on dollars at risk. Too often people mix and match these terms to put their results in the best light. Meaning if a call option they own increases in value from 50c to $1 they will tout the 100% return. But if it expires worthless they will highlight the loss was limited to just 50c or $50 per contract, not that it was 100% loss. Both of these are true of course, but the varied emphasis can be misleading. At least when purchasing options, the accounting is fairly straightforward. The capital required and the risk is limited to the cost or premium paid for the position. This is true for straight purchase of single strike or spread done for a debit.

Because of the leverage of options many long premium positions can deliver returns in excess of 100%. Indeed if an option that goes from 20c to 50c that is 150% gain. But if one only owns two contracts within a $10,000 portfolio that $60 gain translates into less the one half of 1% return on equity.

When it comes to selling options or positions done for a credit the accounting can become a bit more creative. If it expires worthless a claim of a 100% return is often made. If the option position sold for a 50c credit is
forced to cover and bought back for a $1 it was “only” a 50c loss. But even this does not accurately reflect the margin or capital required to establish the short position could have been greater than 50c and therefore the loss was even greater than 100%.

Let’s look at a basic example in the Spyder 500 Trust (SPY). With the SPY currently trading at $205.50 you can sell the $206 and buy the $209 call for $1.20 net credit, for the spread in with a February 20th expiration date.

If shares of SPY are below $206 on February 20th the position expires worthless and you keep the $1.20 premium as a profit. But this is NOT a 100% return. That’s because the margin or capital required to establish the position is $1.80. That is calculated by the width between the strikes, which is $3, minus the premium collected, $1.20. That $1.80 represents your maximum risk or loss that would be incurred if SPY were above $209 on the expiration date.

Therefore, the maximum profit of $1.20 represents a 66% return. Not too shabby for a 10 day period, but not the 100% claimed.

That also means the potential loss of $1.80 translates into 150%, or 1.5x the profit potential. It is important to always keep in mind both the percentage and dollars at risk. This needs to be in the context of both each individual position and the overall portfolio.

This concept of risk-adjusted returns is crucial when we begin to look at the risk/reward ratios of various option strategies.
The Process

While I’m always interested in the fundamentals and basic business of a company my process for identifying trade starts with charts. As a certified technical analyst I use charts as my starting point. Using technical analysis allows me to identify which stocks have momentum, where support and resistance levels are and target set ups that have an attractive risk/reward.

I try to keep it fairly simple using basic trendlines, moving averages and old highs and lows. I go through a logical sequence to get a good technical picture of the underlying target:

What is the overall trend of the underlying?

What are the immediate points of support and resistance?

Is the trend more likely to continue, or is it poised to reverse?

Regardless of our analysis, what are the next logical price targets?

What indicators are available to us to verify our expected price behavior?
Here are some common patterns that one looks to identify.

**Bullish patterns (going up)**
- Buy
- Flag
- Pennant
- Cup with handle
- Ascending triangle
- Symmetrical triangle
- Measured move up
- Ascending scallop
- 3 rising valleys

**Bearish patterns (going down)**
- Sell
- Flag
- Pennant
- Inverted Cup with handle
- Descending triangle
- Symmetrical triangle
- Measured move down
- Descending scallop
- 3 descending peaks

**Reversal patterns**
- Buy
- Diamond bottoms
- Tops rectangle
- Head and shoulders top
- Head
- Shoulder
- Shoulder
All trades are use the charts to establish a specific parameters for entry price, a target for taking profits, and a stop loss for managing risk.

**Profit**

The next step is identifying which option strategy offers the best profit if my thesis plays out. Do I expect large move in a short time period? Then I might use the full leverage of buying short term calls out right. Do I expect a trend to continue over the next few months? I might choose a spread with 60 days or more until expiration. I frequently use a calendar spread to marry these two approaches. What comes with experience is choosing the strategy that best aligns with my investment thesis in terms of time and price.

Creating the right risk/reward means not needing to right all the time.

Let’s take a look at how setting up the proper risk/reward profile for each individual position will boost overall profitability.

A big secret many rich traders know that new traders don’t is the winning percentage for even the best traders is only about 50%-60%. Having big winning trades and small losing trades is their edge.

Big losses will kill your account quickly and small wins will do little to pay for those losses. Our trades have to be asymmetric, where our downside is carefully planned and managed, but our upside is open ended. This is a crucial element for trading success and has to be understood and planned for. Consider the following sets of risk/rewards with win rates.

With a 1:1 risk/reward ratio and 50% win rate a trader breaks even.

With a 2:1 risk/reward ratio and about a 35% win rate a trader breaks even.
With a 3:1 risk/reward ratio and about a 25% win rate a trader breaks even. The risk/reward ratio is used by more experienced traders to compare the expected profits of a trade to the amount of money risked to capture profit. This ratio is calculated mathematically by dividing the amount of profit the trader expects to have made when the position is closed (the reward) by the amount the trader could lose if price moves in the unprofitable direction and the trader is stopped out for a loss.

One of my favorite ways to set up a good risk reward is to use simple 20 and 50 dma averages for entry points. Recent examples of trades I made buying against the moving averages came in JetBlue (JBLU) and Pollo Loco (LOCO).

In JetBlue I got long April $15 calls when shares dipped to the 50 dma back in January. When the stock rallied above $16 I sold some weekly $17 calls to create a diagonal calendar spread for an affective 30c cost basis. I eventually exited for a 130% gain in less than three weeks.
In Pollo Loco I purchased calls on the dip to $25.50 level. The jury is still out as we go to press with this guide.

This is what the risk/reward profile of the outright purchase of calls looks like:
As you can see the risk is limited to the price paid. The profit potential is unlimited as the stock moves higher.

**Probability**

The goal is to achieve a high probability for producing consistent profits. This means for strong directional trades in which I might be right only 50% I want to only risk $1 for the potential make of $2 or more. This is the requirement for debit positions in which I’m purchasing options (puts or calls, spreads or outright).

In order to truly become the “house”, one also needs to know how to employ credit positions that can produce income in sideways or range bound market. Credit spreads get the tailwind of time decay at your back. To further torture the baseball analogy, knowing how to take a “walk” to get on base is a crucial part of the game.

Credit spreads are positions in which you don’t need to do much of anything, except exhibit patience, and you still get to first base.

My basic requirement for credit positions are they should have a 75% probability of expiring out-of-the-money and worthless. The profit from collecting the premium sold should provide at least a 25% return on risk.

I’m talking about positions in which options are sold for a credit. If the value of the options declines a profit can be realized. The profit is limited to the sale price or premium collected. The maximum profit would be realized if the option expires worthless.

Typically credit positions involve puts, calls or a combination of both that have strikes out-of-the-money. Meaning the options have no intrinsic
value; their value is entirely comprised of premium. In this sense the seller, or “writer” of options is acting like an insurance company; you collect the premium but you also assume the risk of making a large payout or loss if there is an adverse event.

To offset this inherently asymmetrical risk/reward profile we need to create a situation that not only has a high probability of success but also make sure we are collecting enough premium for the risk we are assuming.

The first and foremost way we limit and manage our risk is to never sell or short options naked. That is, always use some form of a spread. A typical credit spread involves selling a put or call and then buying a further out-of-the-money put or call for a lower price.

An example of a basic credit put spread in Apple (AAPL) would be with shares trading $125; one could look at options with 30 days until expiration and sell the $123 put for $2.80 a contract and buy the $118 put for $1.10 a contract. This is a $1.70 net credit. If Apple shares are above $125 on the expiration all options expire worthless and the $1.70 maximum profit would be realized. On the other hand if shares sink below $118 the maximum loss of $3.30 would be incurred.

So why would someone put on a position that can only make $1.70 but lose $3.30? Because even if you were moderately wrong about your bullish outlook and even Apple shares declined by up to $2 or 1.5%, you could still realize the maximum profit. In fact, shares could drop by as much as $3.5 or 2.7% to $121.50 and a small profit could still be realized.

Compare this to buying a call option with the $125 strike and 30 days until expiration, which would cost approximately $3.50 a contract. In this case you need shares of Apple to rise an additional $3.50, or be at $128.50 at expiration just to break even.
These two risk/reward graphs of actual positions on May 11, 2015 clearly illustrate the different probabilities and breakeven points for strategies.

The credit bull put spread:

![Credit Bull Put Spread Graph]

The debit call spread:

![Debit Call Spread Graph]
In this case I would choose the credit put spread, which has a much higher probability of achieving a profit.

**The 75% Solution**

While I have the probability of profit in my favor I want to further manage risk. I use basic rule of thumb to close positions once either 75% of profit has been realized or a 75% loss has incurred.

For instance, in the original Apple credit spread example, if shares quickly rallied above $130 the value of the put spread might decline to 30c way before the expiration. At this point I would look to close the position for a profit.

Conversely, if shares of Apple quickly slumped to $120 and the value of the spread might only expand to $2.50, at which point I’d accept the 80c loss.

You can create a sliding scale along a time frame. For instance, if a 50% profit could be realized within a matter of days it may make sense to close the position. If you’re suddenly facing a 50% loss clearly something in your thesis of range bound or declining volatility environment was wrong and it may be best to just vacate.

But no matter the time frame, if an option you've sold short has declined to less than $0.10 a contract, then buy it back and cover yourself. At that point, the risk/reward becomes too asymmetrical. Don’t try to squeeze out the last dime of premium, it could cost you multiple dollars.

Obviously, the credit-spread position has a much higher probability of achieving a profit. To go back to the baseball analogy, credit spreads allow
you to be the batter to the market’s pitcher, forcing it to do all the work by throwing strike after strike.

To set up a position with a high probability of profitability and acceptable risk/reward profile I use to basic parameters.

**I want at least 70% probability of a profit**; that means choosing the inside or short strikes that have less than 25% probability of expiring in-the-money. While many option chains will provide probabilities of expiration a basic rule of thumb is to look at delta. I’m using strikes with a 0.30 delta, meaning they have only 30% chance of being in-the-money on expiration.

**I also want to achieve a 20% return on my risk capital.** This means there must be enough premium to generate sufficient income while mitigating the limited risk of a spread.

Credit positions benefit primarily from time decay and a decline in implied volatility. This makes them best suited for sideways or stocks that exhibits a reliably steady trend.
Three Step Approach

In setting up a trade I take three basic steps:

1. Use the chart to find an attractive entry level and define your trade parameters. This means buying near support and selling at resistance levels. This not only provides an attractive initial price, but also helps you set a realistic price or profit target. It also limit risk, if support is broken the position gets closed for a small loss. Ideally the price target should be at least twice the price magnitude as the stop loss level.

2. Choose a strategy that will deliver at least a 2:1 risk/reward if the price target is achieved. If the target is small and the stop is tight one can simply buy an at-the-money call. If the parameters are wider then using a spread might make more sense.

3. Allow sufficient time for your thesis to play out. If this is a turnaround story you’ll want options that have an expiration that is at least 8-12 months away. If you just looking for a quick technical bounce or an earnings announcement using a shorter term of options, anywhere from two week to three makes, will provide better returns.

A great example is a trade I set up in Priceline (PCLN) as the stock sold off in the wake of competitor’s Expedia (EXPE) weak earnings. I identified the $1,000-$1100 level as significant support and therefore a good entry point.

A close below the old lows at $995 would mean I’m wrong and trigger the stop loss.
The initial price target would be a move back to the 50 dma near the 1180 level. So now I have a target price that is of approximately $65 price move versus a stop loss of a $15 or a 4:1 ratio.

Next, I wanted to make sure the position had enough time to play out and to take into account the upcoming earnings report on February 19th. I chose the April expiration.

Finally, the strategy I chose was a basic vertical spread. When the shares of Priceline dipped to 1,010 I was able to buy the April $1040 calls and sell the April $1080 calls for a $14 net debit for the spread.

The higher strike, $1080, aligns with my price target and would make the spread fully in-the-money. Of course do to time premiums it won’t reach maximum value of $40 until expiration. So I have a profit target to close the position if the value of the spread doubles to $28 for the spread.

To limit the losses am using a combination of a close below $995 or if the value of the spread slips to $10 level. These two numbers should align.
Therefore I have a position that has a risk/reward profile of over 3:1, $14 potential profit versus $4 loss. On a position that can deliver an impressive 100% return on a very reasonable 7% gain in Priceline shares over the next two months.

As the chart above shows the stock rallied quickly over the next several days and I was able to sell the spread at $28 for a quick 100% return.

For credit spreads I look for stocks that have shown steady trends. Two great examples: United Health (UNH) and Kroger (KR). In United Healthcare I was able to sell call credit spreads (bullish) and collect an average of $1.70 for 5 consecutive months before the trend broke.
In Kroger I was in for nearly a year before it the trend failed.

To sum up the balance of profit and profitability; it’s important to understand how risk is measured, knowing how to identify the fat pitches but also having in your arsenal the skill set and patience to occasionally take a walk.

As a final “P” I like taking an overall Portfolio approach. Having a balance of long and short positions, a balance of debit and credit positions. Adjusting overall exposure up or down based on market conditions.

As an option trader I love market volatility, as it presents opportunity. But I do not want volatility within my portfolio. I want achieve consistent, repeatable returns without big drawdowns.

To sum up:

1. Only entering trades that meet given criteria.
2. Keeping the number of positions and the size of each position to appropriate levels for the portfolio size
3. Sticking to the trade parameters. Use stop loss levels to manage risk don’t turn a losing “trade” into a “position of hope”.

Individuals must ultimately find the approach that works best for them. But here are some common pitfalls of option trading that everyone should avoid.

1. Failing to Understand Implied Volatility

   Being wrong on a stock’s direction is clearly an easy way to lose money. But there’s a second, and perhaps even more frustrating way to lose money with options: failing to understand the intricacies of option pricing.

   One of the biggest mistakes new options traders make is not taking into account implied volatility, which is a measure of the expectation or probability of a given size move within a given time frame. Put simply, implied volatility provides a gauge as to whether an option is relatively cheap or expensive based on past price action in the underlying stock, and it is among the most important components in option pricing.

   Therefore, in order to consistently make money trading options, one must attain a basic understanding of implied volatility.

2. Failing to Understand Time Decay

   Traders also commonly fail to realize that options are a wasting asset. One very important component in the price of an option is the time until expiration. So as time goes on, the value of that time decays, with a negative impact on the overall value of the option itself.
If you buy calls or puts outright, and the underlying stock moves in your direction at a slow pace, the option may not gain in value.

However, a basic understanding of option pricing and a grasp of a variety of trading strategies will allow you to offset the impact of time decay - or even turn it to your advantage.

3. Ignoring the Power of Compounding Small Gains

Above, we referenced the risk in swinging for the fences with options. The less-sexy - but far more lucrative - reality is the best options traders grind out steady profits using a wide variety of strategies, looking to consistently earn 2% to 4% a month, with an occasional kicker from speculative bets.

Two percent per month doesn't sound like a lot, but compounded over a year, it adds up to 27%. That's more than three times the average historical return for the S&P 500. Stretch that monthly gain from 2% to 4%, and the annualized profit is on the order of 60%.

The important takeaway here is not the idea of making 60% in a year, but rather the power of consistently hitting high-probability singles rather than swinging for low-probability home runs every time we step up to the plate.

Extreme risk-taking could mean that you're up 100% one month - and down 50% the next. You do that and you're right back where you started, but with an ulcer and heart medication.

There is plenty of room for speculation with options, but to stay ahead of the game, you have to pick your spots wisely.
4. Failing to Diversify

Ideally, no single position should represent more than 5% of a portfolio. My $20k Portfolio typically carries six to 10 positions at a time. These can run from complex, multi-strike hedged positions with four to six months until expiration, to speculative plays based on unusual activity or an upcoming event that will be held for just a few days.

Why? Because again, I never want to get knocked out of the game on one trade, or allow a position to get so large it could threaten gains elsewhere in the portfolio if things go south.

When people go broke trading options, it's usually because they not only swung for the fences on an earnings play, but also put far too much money into that single trade.

5. Swinging for the Fences

When people talk about trading options, the conversation usually turns to ultra-risky strategies. By far, the most common of these is buying call or put options ahead of an earnings number in the hopes of hitting a home run. The upside in being right about such an unpredictable event is a big fat profit.

The downside when you're wrong? That'd be 100%. As in, the underlying stock gaps against you, the options are left worthless.

There is nothing wrong with making the occasional speculative bet, but you have to understand the risk involved and keep the position right-sized.
Resources

There is an overwhelming amount of information available. They range from the very valuable, which can often be gotten free of charge, to the costly in terms of both its price and the damage it can do to your account.

Like all things I like to keep it simple. Here are a few of the books and websites I find invaluable.

Books

*Options as a Strategic Investment*; Larry McMillian. This is a great book for beginners. It goes through all the concepts and strategies in a plain English and easy to understand format.

*Volatility Trading*; Adam Warner. Adam is one of the premier authorities on volatility. He drills down into the importance of understanding how it behaves and impacts option pricing and how to harness it. He looks at trading both standard equity options and explores all the nuances of plethora of VIX related products and trading volatility as its own asset class.

*Options: The Hidden Reality*; Charles Cottle. This book is for advanced traders. I’ve met Charles and heard him speak many times and he continually blows my mind. This is a book you will want to refer back to time and time again. I’ve read it several times and still don’t fully grasp some of what Charles teaches.
Websites

**Chicago Board of Options Exchange**: The CBOE is the leading options exchange. This is the place to get a ton of free educational material, market data and industry news. This is also where you can find all the contract and product specifications. The educational subsite is the *Options Institute*.

**iVolatility.com**: As the name suggests it focus on all things volatility. This includes historical data for every stock option, great graphics and tools such as an option price calculator. Most of the basics are free but they also have premium services for deeper data dives.

**VixCentral**: This is a basic no nonsense display and data bank of the VIX and its related products. It provides easy to read graphics and term structure and skew. Two key items to be aware of in understanding current market environment and option price perception
Brokers

It’s harder for me to quantify brokers as we each have different priorities. Price, customer service, research, ancillary offerings such as banking or even just the look and feel of site or having a “brand name” are personal preferences. But I’ve found these three seem to offer a good balance:

**Ameritrade**, specifically its ThinkorSwim platform has decent commission levels, good analytic tools and the backing of big full service firm. The actual trade interface page can be a bit confusing for beginners. It does offer a “paper trading” virtual account for getting acclimated.

**OptionHouse** recently acquired TradeMonster and they’ve married a low cost, very straightforward and clean looking trading interface with a wealth of tools. The customer service and ancillary services are minimal. It offers a paper trading virtual account.

**Interactive Brokers** offers the lowest commissions and is geared more towards active/professional traders with its emphasis on easy “click to trade” interface. The tools are a bit limited as they assume people are getting what they need elsewhere but it has the basics such as charts, news feeds and historical data. The customer service is excellent.
Glossary
Here is a useful list of option and trading terms courtesy of the CBOE.

Arbitrage
The process in which professional traders simultaneously buy and sell the same or equivalent securities for a riskless profit. See also Risk Arbitrage.

Ask Price
The price at which a seller is offering to sell an option or stock.

Assignment
The receipt of an exercise notice by an option writer (seller) that obligates him to sell (in the case of a call) or purchase (in the case of a put) the underlying security at the specified strike price.

At-the-money
An option is at-the-money if the strike price of the option is equal to the market price of the underlying security.

Automatic Exercise
A protection procedure whereby the Options Clearing Corporation attempts to protect the holder of an expiring in-the-money option by automatically exercising the option on behalf of the holder.

Average Down
To buy more of a security at a lower price, thereby reducing the holder’s average cost. (Average Up: to buy more at a higher price.)
**Bearish**
An adjective describing an opinion or outlook that expects a decline in price, either by the general market or by an underlying stock, or both. *See also Bullish.*

**Bear Spread**
An option strategy that makes its maximum profit when the underlying stock declines and has its maximum risk if the stock rises in price. The strategy can be implemented with either puts or calls. In either case, an option with a higher striking price is purchased and one with a lower striking price is sold, both options generally having the same expiration date. *See also Bull Spread.*

**Beta**
A measure of how a stock's movement correlates to the movement of the entire stock market. The Beta is not the same as volatility. *See also Standard Deviation and Volatility.*

**Bid Price**
The price at which a buyer is willing to buy an option or stock.

**Box Spread**
A type of option arbitrage in which both a bull spread and a bear spread are established for a near-riskless position. One spread is established using put options and the other is established using calls. The spread may both be debit spreads (call bull spread vs. put bear spread) or both credit spreads (call bear spread vs. put bull spread). **Break-Even Point**--the stock price (or prices) at which a particular strategy neither makes nor loses money. It generally pertains to the result at the expiration date of the options involved.
in the strategy. A "dynamic" break-even point is one that changes as time passes.

**Broad-Based**
Generally referring to an index, it indicates that the index is composed of a sufficient number of stocks or of stocks in a variety of industry groups. *See also Narrow-Based.*

**Bullish**
Describing an opinion or outlook in which one expects a rise in price, either by the general market or by an individual security. *See also Bearish.*

**Bull Spread**
An option strategy that achieves its maximum potential if the underlying security rises far enough, and has its maximum risk if the security falls far enough. An option with a lower striking price is bought and one with a higher striking price is sold, both generally having the same expiration date. Either puts or calls may be used for the strategy. *See also Bear Spread.*

**Butterfly Spread**
An option strategy that has both limited risk and limited profit potential, constructed by combining a bull spread and a bear spread. Three striking prices are involved, with the lower two being utilized in one spread and the higher two in the opposite spread. The strategy can be established with either puts or calls; there are four different ways of combining options to construct the same basic position.

**Buy-write**
*See also Covered Call.*
C

Calendar Spread
An option strategy in which a short-term option is sold and a longer-term option is bought, both having the same striking price. Either puts or calls may be used.

Calendar Straddle or Combination
See Calendar Spread.

Call
An Option contract that gives the holder the right to buy the underlying security at a specified price for a certain, fixed period of time. See also Put.

Capitalization-Weighted Index
A stock index which is computed by adding the capitalization (float times price) of each individual stock in the index, and then dividing by the divisor. The stocks with the largest market values have the heaviest weighting in the index. See also Float, Divisor.

Capped-Style Option
A capped option is an option with an established profit cap or cap price. The cap price is equal to the option's strike price plus a cap interval for a call option or the strike price minus a cap interval for a put option. A capped option is automatically exercised when the underlying security closes at or above (for a call) or at or below (for a put) the Option's cap price.

Carrying Cost
The interest expense on a debit balance created by establishing a position.

Cash-Based
Referring to an option or future that is settled in cash when exercised or
assigned. No physical entity, either stock or commodity, is received or delivered.

**Cash Settlement**
The process by which the terms of an option contract are fulfilled through the payment or receipt in dollars of the amount by which the option is in-the-money as opposed to delivering or receiving the underlying stock.

**CBOE**
The Chicago Board Options Exchange; the first national exchange to trade listed stock options.

**Class (of Options)**
Option contracts of the same type (call or put) and Style (American, European or Capped) that cover the same underlying security.

**Closing Purchase**
A transaction in which the purchaser’s intention is to reduce or eliminate a short position in a given series of options.

**Closing Sale**
A transaction in which the seller’s intention is to reduce or eliminate a long position in a given series of options.

**Closing Transaction**
A trade that reduced an investor’s position. Closing buy transactions reduce short positions and closing sell transactions reduce long positions. *See also* Opening Transaction.

**Collateral**
The loan value of marginable securities; generally used to finance the writing of uncovered options.
Combination
Any position involving both put and call options that is not a straddle.

Commodities
See Futures Contract.

Contingent Order
An order which can be executed only if another event occurs; i.e. "sell Oct 45 call 7.25 with stock 52 or lower".

Conversion Arbitrage
A riskless transaction in which the arbitrageur buys the underlying security, buys a put, and sells a call. The options have the same terms. See also Reversal Arbitrage.

Conversion Ratio
See Convertible Security.

Converted Put
See Synthetic Put.

Convertible Security
A security that is convertible into another security. Generally, a convertible bond or convertible preferred stock is convertible into the underlying stock of the same corporation. The rate at which the shares of the bond or preferred stock are convertible into the common is called the conversion ratio.

Cover
To buy back as a closing transaction an option that was initially written.

Covered
A written option is considered to be covered if the writer also has an
opposing market position on a share-for-share basis in the underlying security. That is, a short call is covered if the underlying stock is owned, and a short put is covered (for margin purposes) if the underlying stock is also short in the account. In addition, a short call is covered if the account is also long another call on the same security, with a striking price equal to or less than the striking price of the short call. A short put is covered if there is also a long put in the account with a striking price equal to or greater than the striking price of the short put.

**Covered Call**
An option strategy in which a call option is written against long stock on a share-for-share basis.

**Covered Call Option Writing**
A strategy in which one sells call options while simultaneously owning an equivalent position in the underlying security or strategy in which one sells put options and simultaneously is short an equivalent position in the underlying security.

**Covered Put Write**
A strategy in which one sells put options and simultaneously is short an equal number of shares of the underlying security.

**Covered Straddle**
An option strategy in which one call and one put with the same strike price and expiration are written against 100 shares of the underlying stock. In actuality, this is not a "covered" strategy because assignment on the short put would require purchase of stock on margin. This method is also known as a covered combination.

**Covered Straddle Write**
The term used to describe the strategy in which an investor owns the
underlying security and also writes a straddle on that security. This is not really a covered position.

**Credit**
Money received in an account. A credit transaction is one in which the net sale proceeds are larger than the net buy proceeds (cost), thereby bringing money into the account. *See also Debit.*

**Cycle**
The expiration dates applicable to various classes of options. There are three cycles: January/April/July/October, February/May/August/November, and March/June/September/December.

**Debit**
An expense, or money paid out from an account. A debit transaction is one in which the net cost is greater than the net sale proceeds. *See also Credit.*

**Deliver**
To take securities from an individual or firm and transfer them to another individual or firm. A call writer who is assigned must deliver stock to the call holder who exercised. A put holder who exercises must deliver stock to the put writer who is assigned.

**Delivery**
The process of satisfying an equity call assignment or an equity put exercise. In either case, stock is delivered. For futures, the process of transferring the physical commodity from the seller of the futures contract to the buyer. Equivalent delivery refers to a situation in which delivery may be made in any of various, similar entities that are equivalent to each other (for example, Treasury bonds with differing coupon rates).
Delta
The amount by which an option’s price will change for a one-point change in price by the underlying entity. Call options have positive deltas, while put options have negative deltas. Technically, the delta is an instantaneous measure of the option’s price change, so that the delta will be altered for even fractional changes by the underlying entity. See also Hedge Ratio.

Delta Spread
A ratio spread that is established as a neutral position by utilizing the deltas of the options involved. The neutral ratio is determined by dividing the delta of the purchased option by the delta of the written option. See also Ratio Spread and Delta.

Depository Trust Corporation (DTC)
A corporation that will hold securities for member institutions. Generally used by option writers, the DTC facilitates and guarantees delivery of underlying securities if assignment is made against securities held in DTC.

Derivative security
A financial security whose value is determined in part from the value and characteristics of another security, the underlying security.

Diagonal Spread
Any spread in which the purchased options have a longer maturity than do the written options as well as having different striking prices. Typical types of diagonal spreads are diagonal bull spreads, diagonal bear spreads, and diagonal butterfly spreads.

Discount
An option is trading at a discount if it is trading for less than its intrinsic value. A future is trading at a discount if it is trading at a price less than the
cash price of its underlying index or commodity. See also Intrinsic Value and Parity.

**Discount Arbitrage**
A riskless arbitrage in which a discount option is purchased and an opposite position is taken in the underlying security. The arbitrageur may either buy a call at a discount and simultaneously sell the underlying security (basic call arbitrage) or may buy a put at a discount and simultaneously buy the underlying security (basic put arbitrage). See also Discount.

**Discretion**
Freedom given to the floor broker by an investor to use his judgment regarding the execution of an order. Discretion can be limited, as in the case of a limit order that gives the floor broker 125 or 25 point from the stated limit price to use his judgment in executing the order. Discretion can also be unlimited, as in the case of a market-not-held order. See Limit Order and Market Not Held Order.

**Divisor**
A mathematical quantity used to compute an index. It is initially an arbitrary number that reduces the index value to a small, workable number. Thereafter, the divisor is adjusted for stock splits (price-weighted index) or additional issues of stock (capitalization-weighted index).

**Downside Protection**
Generally used in connection with covered call writing, this is the cushion against loss, in case of a price decline by the underlying security, that is afforded by the written call option. Alternatively, it may be expressed in terms of the distance the stock could fall before the total position becomes a loss (an amount equal to the option premium), or it can be expressed as percentage of the current stock price. See also Covered Call Write.
Dynamic
For option strategies, describing analyses made during the course of changing security prices and during the passage of time. This is as opposed to an analysis made at expiration of the options used in the strategy. A dynamic break-even point is one that changes as time passes. A dynamic follow-up action is one that will change as either the security price changes or the option price changes or time passes.

E

Early Exercise (assignment)
The exercise or assignment of an option contract before its expiration date.

Escrow Receipt
A receipt issued by a bank in order to verify that a customer (who has written a call) in fact owns the stock and therefore the call is considered covered.

European Exercise
A feature of an option that stipulates that the option may only be exercised at its expiration. Therefore, there can be no early assignment with this type of option.

Ex-Dividend
The process whereby a stock's price is reduced when a dividend is paid. The ex-dividend date (ex-date) is the date on which the price reduction takes place. Investors who own stock on the ex-date will receive the dividend, and those who are short stock must pay out the dividend.

Equity Options
Options on shares of an individual common stock. See also Non-Equity Option.
**European-Style Options**
An option contract that may be exercised only during a specified period of time just prior to its expiration.

**Exercise**
To implement the right under which the holder of an option is entitled to buy (in the case of a call) or sell (in the case of a put) the underlying security.

**Exercise Limit**
The limit on the number of contracts which a holder can exercise in a fixed period of time. Set by the appropriate option exchange, it is designed to prevent an investor or group of investors from "cornering" the market in a stock.

**Exercise price**
The price at which the option holder may buy or sell the underlying security, as defined in the terms of his option contract. It is the price at which the call holder may exercise to buy the underlying security or the put holder may exercise to sell the underlying security. For listed options, the exercise price is the same as the Striking Price. *See also Exercise.*

**Exercise settlement amount**
The difference between the exercise price of the option and the exercise settlement value of the index on the day an exercise notice is tendered, multiplied by the index multiplier.

**Expected Return**
A rather complex mathematical analysis involving statistical distribution of stock prices, it is the return which an investor might expect to make on an investment if he were to make exactly the same investment many times throughout history.
Expiration cycle
An expiration cycle relates to the dates on which options on a particular underlying security expire. A given option, other than LEAPS®, will be assigned to one of three cycles, the January cycle, the February cycle or the March cycle.

Expiration date
The day on which an option contract becomes void. For stock options expiring prior to February 15, 2015, this date is the Saturday immediately following the third Friday of the expiration month. For stock options expiring on or after February 15, 2015, this date is the third Friday of the expiration month. Brokerage firms, however, may set an earlier deadline for notification of an option buyer’s intention to exercise. If Friday is a holiday, the last trading day will be the preceding Thursday. See also Expiration Time and Automatic Exercise.

Expiration time
The time of day by which all exercise notices must be received on the expiration date. Technically, the expiration time is currently 5:00PM on the expiration date, but public holders of option contracts must indicate their desire to exercise no later than 5:30PM on the business day preceding the expiration date. The times are Eastern Time. See also Expiration Date.

Facilitation
The process of providing a market for a security. Normally, this refers to bids and offers made for large blocks of securities, such as those traded by institutions. Listed options may be used to offset part of the risk assumed by the trader who is facilitating the large block order. See also Hedge Ratio.
Fair Value
Normally, a term used to describe the worth of an option or futures contract as determined by a mathematical model. Also sometimes used to indicate intrinsic value. See also Intrinsic Value and Model.

FLEX Options
Exchange traded equity or index options, where the investor can specify within certain limits, the terms of the options, such as exercise price, expiration date, exercise type, and settlement calculation.

Float
The number of shares outstanding of a particular common stock.

Floor Broker
A broker on the exchange floor who executes the orders of public customers or other investors who do not have physical access to the trading area.

Fundamental Analysis
A method of analyzing the prospects of a security by observing accepted accounting measures such as earnings, sales, assets, and so on. See also Technical Analysis.

Futures Contract
A standardized contract calling for the delivery of a specified quantity of a commodity at a specified date in the future.

Gamma
The rate of change in an option’s delta for a one-unit change in the price of the underlying security. See also Delta.

Good Until Canceled (GTC)
A designation applied to some types of orders, meaning the order remains
in effect until it is either filled or canceled. See also Stop Limited and, Trading Limit.

H

Hedge
A conservative strategy used to limit investment loss by effecting a transaction, which offsets an existing position.

Hedge Ratio
The mathematical quantity that is equal to the delta of an option. It is useful in that a theoretically neutral hedge can be established by taking offsetting positions in the underlying stock and its call options. See also Facilitation and Delta.

Holder
The purchaser of an option.

Horizontal Spread
An option strategy in which the options have the same striking price, but different expiration dates.

I

Implied Volatility
A measure of the volatility of the underlying stock, it is determined by using option prices currently existing in the market at the time rather than using historical data on the price changes of the underlying stock. See also Volatility.

Incremental Return Concept
A strategy of covered call writing in which the investor is striving to earn an
additional return from option writing against a stock position which he (she) has targeted to sell -- possibly at substantially higher prices.

**Index**
A compilation of the prices of several common entities into a single number. *See also Price-Weighted Index, Capitalization-Weighted Index.*

**Index Option**
An option whose underlying entity is an index. Most index options are cash-based.

**Institution**
An organization, probably very large, engaged in professional investing in securities. Normally a bank, insurance company, or mutual fund.

**In-the-money**
A term describing any option that has intrinsic value. A call option is in-the-money if the underlying security is higher than the striking price of the call. A put option is in-the-money if the security is below the striking price. *See also Out-of-the-Money and Intrinsic Value.*

**Intrinsic value**
The value of an option if it were to expire immediately with the underlying stock at its current price; the amount by which an option is in-the-money. For call options, this is the difference between the stock price and the striking price, if that difference is a positive number, or zero otherwise. For put options it is the difference between the striking price and the stock price, if that difference is positive, and zero otherwise. *See also In-the-Money, Time Value Premium and Parity.*
**Last Trading Day**
The very last full day of open trading before an options expiration day, usually the third Friday of the expiration month.

**LEAPS**
Long-term Equity Anticipation Securities, or LEAPS, are long-term stock or index options. LEAPS, like all options, are available in two types, calls and puts, with expiration dates up to three years in the future.

**Leg**
A risk-oriented method of establishing a two-sided position. Rather than entering into a simultaneous transaction to establish the position (a spread, for example), the trader first executes one side of the position, hoping to execute the other side at a later time and a better price. The risk materializes from the fact that a better price may never be available, and a worse price must eventually be accepted.

**Letter of Guarantee**
A letter from a bank to a brokerage firm which states that a customer (who has written a call option) does indeed own the underlying stock and the bank will guarantee delivery if the call is assigned. Thus the call can be considered covered. Not all brokerage firms accept letters of guarantee. Also: letter issued to O.C.C. by member firms covering a guarantee of any trades made by one of its customers, (a trader or broker on the exchange floor).
Leverage
In investments, the attainment of greater percentage profit and risk potential. A call holder has leverage with respect to a stock holder - the former will have greater percentage profits and losses than the latter, for the same movement in the underlying stock.

Limit
See Trading Limit.

Limit Order
An order to buy or sell securities at a specified price (the limit). A limit order may also be placed "with discretion". In this case, the floor broker executing the order may use his (her) discretion to buy or sell at a set amount beyond the limit if he (she) feels it is necessary to fill the order.

Listed Option
A put or call option that is traded on a national options exchange. Listed options have fixed striking prices and expiration dates. See also Over-the-Counter Option.

Local
A trader on a futures exchange who buys and sells for his own account and may sometimes also fill public orders.

Lognormal Distribution
A statistical distribution that is often applied to the movement of stock prices. It is a convenient and logical distribution because it implies that stock prices can theoretically rise forever but cannot fall below zero.

Long Position
A position wherein an investor's interest in a particular series of options is
as a net holder (i.e., the number of contracts bought exceeds the number of contracts sold).

M

Margin
To buy a security by borrowing funds from a brokerage house. The margin requirement - the maximum percentage of the investment that can be loaned by the brokerage firm -- is set by the Federal Reserve Board.

Margin Requirement (for options)
The amount an uncovered (naked) option writer is required to deposit and maintain to cover a position. The margin requirement is calculated daily.

Mark-To-Market
An accounting process by which the price of securities held in account are valued each day to reflect the last sale price or market quote if the last sale is outside of the market quote. The result of this process is that the equity in an account is updated daily to properly reflect current security prices.

Market Basket
A portfolio of common stocks whose performance is intended to simulate the performance of a specific index. See Index.

Market-Maker
An exchange member whose function is to aid in the making of a market, by making bids and offers for his account in the absence of public buy or sell orders. Several market-makers are normally assigned to a particular security. The market-maker system encompasses the market-makers, floor brokers, and order book officials. See also Order Book Official and Specialist.

Market Not Held Order
Also a market order, but the investor is allowing the floor broker who is
executing the order to use his own discretion as to the exact timing of the execution. If the floor broker expects a decline in price and he is holding a "market not held buy order", he (she) may wait to buy, figuring that a better price will soon be available. There is no guarantee that a "market not held order" will be filled.

**Market Order**
An order to buy or sell securities at the current market. The order will be filled as long as there is a market for the security.

**Married Put and Stock**
The simultaneous purchase of stock and the corresponding number of put options. This is a limited risk strategy during the life of the puts because the stock can be sold at the strike price of the puts.

**Married Put Strategy**
A put and stock are considered to be married if they are bought on the same day, and the position is designated at that time as a hedge.

**Model**
A mathematical formula designed to price an option as a function of certain variables - generally stock price, striking price, volatility, time to expiration, dividends to be paid, and the current risk-free interest rate. The Black-Scholes model is one of the more widely used models.

**N**

**Naked Option**
*See Uncovered Option.*

**Naked writer**
*See Uncovered call writing and Uncovered put writing.*
**Narrow-Based**
Generally referring to an index, it indicates that the index is composed of only a few stocks, generally in a specific industry group. *See also broad-based.*

**Neutral**
Describing an opinion that is neither bearish nor bullish. Neutral option strategies are generally designed to perform best if there is little or no net change in the price of the underlying stock or index. *See also Bearish and Bullish.*

**Non-Equity Option**
An option whose underlying entity is not common stock; typically refers to options on physical commodities and index options.

"Not Held"
*See Market Not Held Order.*

**Notice Period**
The time during which the buyer of a futures contract can be called upon to accept delivery. Typically, the 3 to 6 weeks preceding the expiration of the contract.

**O**

**Opening Purchase**
A transaction in which the purchaser's intention is to create or increase a long position in a given series of options.

**Opening Sale**
A transaction in which the seller's intention is to create or increase a short position in a given series of options.
Opening Transaction
A trade that adds to the net position of an investor. An opening buy transaction adds more long securities to the account. An opening sell transaction adds more short securities. See also Closing Transaction.

Open Interest
The number of outstanding option contracts in the exchange market or in a particular class or series.

Option Pricing Curve
A graphical representation of the projected price of an option at a fixed point in time. It reflects the amount of time value premium in the option for various stock prices, as well. The curve is generated by using a mathematical model. The delta (or hedge ratio) is the slope of a tangent line to the curve at a fixed stock price. See also Delta, Hedge Ratio, and Model.

Options Clearing Corporation (OCC)
The issuer of all listed option contracts that are trading on the national option exchanges.

Order Book Official
The exchange employee in charge of keeping a book of public limit orders on exchanges utilizing the "maker-maker" system, as opposed to the "specialist system", of executing orders. See also Market-Maker and Specialist.

Out-of-the-money
A call option is out-of-the-money if the strike price is greater than the market price of the underlying security. A put option is out-of-the-money if the strike price is less than the market price of the underlying security.
Over-the-Counter Option (OTC)
An option traded off-exchange, as opposed to a listed stock option. The OTC option has a direct link between buyer and seller, has no secondary market, and has no standardization of striking prices and expiration dates. See also Listed Stock Option and Secondary Market.

Overvalued
Describing a security trading at a higher price than it logically should. Normally associated with the results of option price predictions by mathematical models. If an option is trading in the market for a higher price than the model indicates, the option is said to be overvalued. See also Fair Value and Undervalued.

P

Parity
Describing an in-the-money option trading for its intrinsic value; that is, an option trading at parity with the underlying stock. Also used as a point of reference - an option is sometimes said to be trading at a half-point over parity or at a quarter-point under parity. An option trading under parity is a discount option. See also Discount and Intrinsic Value.

Physical Option
An option whose underlying security is a physical commodity that is not stock or futures. The physical commodity itself (a currency, treasury debt issue, commodity) - underlies that option contract. See also equity option, index option.

Position
As a noun, specific securities in an account or strategy. (A covered call writing position might be long 1,000 XYZ and short 10 XYZ January 30
calls). As a verb, to facilitate; to buy or sell - generally a block of securities - thereby establishing a position. See also Facilitation and Strategy.

**Position Limit**
The maximum number of put or call contracts on the same side of the market that can be held in any one account or group of related accounts. Short puts and long calls are on the same side of the market. Short calls and long puts are on the same side of the market.

**Premium**
The price of an option contract, determined in the competitive marketplace, which the buyer of the option pays to the option writer for the rights conveyed by the option contract.

**Price-Weighted Index**
A stock index which is computed by adding the prices of each stock in the index, and then dividing by the divisor. See also Capitalization-weighted index, Divisor.

**Payoff Diagram**
See Profit Graph.

**Profit Graph**
A graphical representation of the potential outcomes of a strategy. Dollars of profit or loss are graphed on the vertical axis, and various stock prices are graphed on the horizontal axis. Results may be depicted at any point in time, although the graph usually depicts the results at expiration of the options involved in the strategy.

**Profit Range**
The range within which a particular position makes a profit. Generally used in reference to strategies that have two break-even points - an upside break-
even and a downside break-even. The price range between the two break-even points would be the profit range. *See also Break-Even Point.*

**Profit Table**
A table of results of a particular strategy at some point in time. This is usually a tabular compilation of the data drawn on a profit graph. *See also Profit Graph.*

**Protected Strategy**
A position that has limited risk. A protected short sale (short stock, long call) has limited risk; as does a protected straddle write (short straddle, long out-of-the-money combination). *See also Combination and Straddle.*

**Public Book (of orders)**
The orders to buy or sell, entered by the public that are generally away from the current market. The order book official or specialist keeps the public book. Market-Makers on the CBOE can see the highest bid and lowest offer at any time. The specialist's book is closed (only he knows at what price and in what quantity the nearest public orders are). *See also Order Book Official, Market-Maker, and Specialist.*

**Put**
An option contract that gives the holder the right to sell the underlying security at a specified price for a certain fixed period of time. *See also Call.*

**Q** There are no glossary terms for this letter.

**R**

**Ratio Calendar Combination**
A strategy consisting of a simultaneous position of a ratio calendar spread
using calls and a similar position using puts, where the striking price of the
calls is greater than the striking price of the puts.

**Ratio Calendar Spread**
Selling more near-term options than longer-term ones purchased, all with
the same strike; either puts or calls.

**Ratio Spread**
Constructed with either puts or calls, the strategy consists of buying a
certain amount of options and then selling a larger quantity of more out-of-
the-money options.

**Ratio Strategy**
A strategy in which one has an unequal number of long securities and short
securities. Normally, it implies a preponderance of short options over either
long options or long stock.

**Ratio Write**
Selling of call options in a ratio higher than 1 to 1 against the stock that is
owned.

**Resistance**
A term in technical analysis indicating a price area higher than the current
stock price where an abundance of supply exists for the stock and therefore
the stock may have trouble rising through the price. *See also Support.*

**Return (on investment)**
The percentage profit that one makes, or might make, on his investment.

**Return if Exercised**
The return that a covered call writer would make if the underlying stock
were called away.
**Reversal Arbitrage**
A riskless arbitrage that involves selling the stock short, writing a put, and buying a call. The options have the same terms. *See also Conversion Arbitrage.*

**Rho**
The expected change in an option's theoretical value for a 1 percent change in interest rates. *See also Theoretical Value.*

**Risk Arbitrage**
A form of arbitrage that has some risk associated with it. Commonly refers to potential takeover situations where the arbitrageur buys the stock of the company about to be taken over and sells the stock of the company that is effecting the takeover.

**Roll Down**
Close out options at one strike and simultaneously open other options at a lower strike.

**Roll Forward (Out)**
Close-out options at a near-term expiration date and open options at a longer-term expiration date.

**Rolling**
A follow-up action in which the strategist closes options currently in the position and opens other options with different terms, on the same underlying stock. *See also Roll Down, Roll Forward, and Roll Up.*

**Roll Up**
Close out options at a lower strike and open options at a higher strike.
Secondary Market
A market that provides for the purchase or sale of previously sold or bought options through closing transactions.

Series
All option contracts of the same class that also have the same unit of trade, expiration date and strike price.

Settlement Price
The official price at the end of a trading session. This price is established by The Options Clearing Corporation and is used to determine changes in account equity, margin requirements, and for other purposes. See also Mark-to-market.

Short Position
A position wherein a person's interest in a particular series of options is as a net writer (i.e., the number of contracts sold exceeds the number of contracts bought).

Specialist
An exchange member whose function it is to both make markets--buy and sell for his own account in the absence of public orders--and to keep the book of public orders. Most stock exchanges and some option exchanges utilize the specialist system of trading.

Spread Order
An order to simultaneously transact two or more option trades. Typically, one option would be bought while another would simultaneously be sold. Spread orders may be limit orders, not held orders, or orders with discretion. They cannot be stop orders, however.
**Spread Strategy**
Any option position having both long options and short options of the same type on the same underlying security.

**Standard Deviation**
A measure of the volatility of a stock. It is a statistical quantity measuring the magnitude of the daily price changes of that stock.

"**Static" Return**
The return that an investor would make on a particular position if the underlying stock were unchanged in price at the expiration of the options in the position.

**Stop-Limit Order**
Similar to a stop order, the stop-limit order becomes a limit order, rather than a market order, when the security trades at the price specified on the stop. *See also* Stop Order.

**Stop Order**
An order, placed away from the current market, that becomes a market order if the security trades at the price specified on the stop order. Buy stop orders are placed above the market while sell stop orders are placed below.

**Straddle**
The purchase or sale of an equal number of puts and calls having the same terms.

**Strategy**
With respect to option investments, a preconceived, logical plan of position selection and follow-up action.

**Strike Price**
The stated price per share for which the underlying security may be
purchased (in the case of a call) or sold (in the case of a put) by the option holder upon exercise of the option contract.

**Striking Price Interval**
The distance between striking prices on a particular underlying security. Normally, the interval is 2.50 points for stocks under $25, 5 points for stocks selling over $25 per share, and 10 points (or greater) is acceptable for stocks over $200 per share. There are, however, exceptions to this general guideline.

**Sub-Index**
*See narrow-based index.*

**Suitability**
A requirement that any investing strategy fall within the financial means and investment objectives of an investor.

**Suitable**
Describing a strategy or trading philosophy in which the investor is operating in accordance with his (her) financial means and investment objectives.

**Support**
A term in technical analysis indicating a price area lower than the current price of the stock, where demand is thought to exist. Thus a stock would stop declining when it reached a support area. *See also Resistance.*

**Synthetic Put**
A strategy equivalent in risk to purchasing a put option where an investor sells stock short and buys a call.

**Synthetic Stock**
An option strategy that is equivalent to the underlying stock. A long call
and a short put is synthetic long stock. A long put and a short call is synthetic short stock.

Technical Analysis
The method of predicting future stock price movements based on observation of historical stock price movements.

Terms
The collective name denoting the expiration date, striking price, and underlying stock of an option contract.

Theoretical Value
The price of an option, or a combination of options, as computed by a mathematical model.

Theta
A measure of the rate of change in an option's theoretical value for a one-unit change in time to the option's expiration date. See Time Decay.

Time Decay
A term used to describe how the theoretical value of an option "erodes" or reduces with the passage of time. Time decay is especially quantified by Theta.

Time Spread
See Calendar Spread.

Time Value
The portion of the option premium that is attributable to the amount of time remaining until the expiration of the option contract. Time value is whatever value the option has in addition to its intrinsic value.
**Time Value Premium**
The amount by which an option’s total premium exceeds its intrinsic value.

**Total Return Concept**
A covered call writing strategy in which one views the potential profit of the strategy as the sum of capital gains, dividends, and option premium income, rather than viewing each one of the three separately.

**Tracking Error**
The amount of difference between the performance of a specific portfolio of stocks and a broad-based index with which they are being compared. See also *market basket*.

**Trader**
An investor or professional who makes frequent purchases and sales.

**Trading Limit**
The exchange-imposed maximum daily price change that a futures contract or futures option contract can undergo.

**Treasury Bill/Option Strategy**
(90/10 strategy) a method of investment in which one places approximately 90% of his funds in risk-free, interest-bearing assets such as Treasury bills, and buys options with the remainder of his assets.

**Type**
The classification of an option contract as either a put or a call.

**Uncovered Call Writing**
A short call option position in which the writer does not own an equivalent position in the underlying security represented by his option contracts.
**Uncovered Option**
A written option is considered to be uncovered if the investor does not have an offsetting position in the underlying security. *See also Covered.*

**Uncovered Put Writing**
A short put option position in which the writer does not have a corresponding short position in the underlying security or has not deposited, in a cash account, cash or cash equivalents equal to the exercise value of the put.

**Underlying Security**
The security subject to being purchased or sold upon exercise of the option contract.

**Undervalued**
Describing a security that is trading at a lower price than it logically should. Usually determined by the use of a mathematical model. *See also Overvalued and Fair Value.*

**Unit of Trading**
The minimum quantity or amount allowed when trading a security. The normal minimum for common stock is 1 round lot or 100 shares. The normal minimum for options is one contract (which normally covers 100 shares of stock).

**Variable Ratio Write**
An option strategy in which the investor owns 100 shares of the underlying security and writes two call options against it, each option having a different striking price.
**Vega**
A measure of the rate of change in an option's theoretical value for a one-unit change in the volatility assumption.

**Vertical Spread**
1) Most commonly used to describe the purchase of one option and sale of another where both are of the same type and same expiration, but have different strike prices. 2) It is also used to describe a delta-neutral spread in which more options are sold than are purchased.

**Volatility**
A measure of the fluctuation in the market price of the underlying security. Mathematically, volatility is the annualized standard deviation of returns.

**Write**
To sell an option. The investor who sells is called the writer.

X, Y and Z have no words.