YOUR HANDBOOK TO THE BASIC DEGREE

Motley Fool Options Whiz

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Options Whiz: Your Handbook to The Basic Degree

Brought to you by **Motley Fool Options**

Lesson1: Talk the Options Talk

Options investing has its own lingo. We need to learn it before we can put our brilliance to work and make money. So do as my friend Lewis Carroll says — "Begin at the beginning and go on till you come to the end: then stop." To the beginning…

The Goods

Readings:

- **Breaking Down the Basics of Options**
  http://newsletters.fool.com/50/optionsu/2010/06/10/breaking-down-the-basics-of-options.aspx
- **Options Nuts & Bolts**
  http://newsletters.fool.com/50/optionsu/2009/08/11/options-nuts-and-bolts.aspx
- **Video Extra: The Value of Time**
  http://newsletters.fool.com/50/optionsu/2010/10/08/video-extra-the-value-of-time.aspx

Key Topics:

- **Options vocabulary:** We need to make sure we know these terms so we can properly communicate trade recommendations and follow-up actions.
- **Option premium = intrinsic value + time:** Quantifying intrinsic value and time value helps us make smarter decisions when we are looking to take profits, take follow-up actions, or assess whether or not we might be assigned early.
- **Moneyness:** Using these terms helps us look smart at cocktail parties.
- **Call options vs. put options:** All of the more sophisticated and fancy options strategies rely on combinations of buying and selling calls and puts. Without fully understanding these, we can't move on to the fun stuff.

The Foolish Fundamentals

Options Vocabulary

Here's some straight vocabulary, with my take on why you should care:

Option: An option is a contract representing the right to buy or sell a stock. The contract specifies the:

1. underlying stock
2. expiration date
3. strike price

In order to be useful, we also need to know the action (buy or sell) and the quantity (how many contracts). At the end of the time frame, an option can either be "exercised" (if it has value) or it "expires" if it has no value. We only give a hoot about options that correspond to stocks, but options exist on other stuff, too.

Call option: An option contract that represents the right to **buy** a stock (at a set price, by a certain date).

- The value of a call option will increase as a stock's price increases. It's a bet on a stock's upside. A real life example of a call option is volunteering. You pay a small price up front (in time and energy) for a potential big reward if the Big Man (or being) above awards you brownie points.

Put option: An option contract that represents the right to **sell** a stock (at a set price, by a certain date).

- The value of a put option will increase as a stock's price declines. It's a bet on a stock's downside. A real life example of a put option is life insurance. You pay a small price up front to give the downside financial risk to the insurance company.

Contracts: Options contracts are standardized to make buying and selling them simpler. Each option contract refers to the fate of 100 shares of an underlying stock.

- For example: Three call option contracts represent the right to BUY 300 shares of the underlying stock.
- Keep this in mind when sizing your options positions.

Strike price: The price at which the option buyer and seller agree to buy or sell shares.

- This is also known as the "exercise price." Option contracts exist for many different strike prices for each underlying stock.

Expiration: The date on which the option contract (terms of agreement) ends.

- Because contracts are standardized, contracts end (or "expire") on the Saturday after the third Friday of each month. So the January 2011 options contracts expire on Saturday, Jan. 22. The last day you could alter your position would be during trading hours on Friday, Jan. 21.

Option premium: The price of an option contract. An option's premium has two components: intrinsic value and time value.

- We care about the option premium because it is the cost of the option. The option premium is the sum of its two components: intrinsic value and time value.

Intrinsic value (IV): The value of an option attributable to the strike price relative to the stock price. IV's calculation differs with calls and puts, but can never be less than zero:

- For a call option, intrinsic value is equal to [stock price – strike price].
- For a put option, intrinsic value is equal to [strike price – stock price]
- Put numbers in these formulas to help make sense of it all. Remember, a call option is a bet on a stock's upside, so it will be intrinsically valuable if [stock price > strike price]. More on this later…

Time value (TV): The value of an option attributable to the possibility that the profitability of the option will change by the option's expiration date — it places a dollar value on the fact that things could work out (or fall apart) because there is still time remaining. TV's calculation is the same for calls and puts, and it declines over the life of the option because time is running out.

- Time value is equal to [option premium – intrinsic value]
- We know that time is money, and time value is simply the explicit value of the time that remains until the option contract expires. More on this later, too…

Moneyness: a reference to whether or not an option has intrinsic value (it may or may not be a made up word). Moneyness refers to whether an option is "in the money," "out of the money," or "at the money."

In the money (ITM): Indicates the option contract has intrinsic value.

- Each brokerage firm has its own policy when it comes to exercise. Most, however, will automatically exercise an option contract that is $0.01 in-the-money. To avoid surprises, you should know your broker's policy.

Out of the money (OTM): Indicates the option contract does not have intrinsic value — so the entire option premium is made up of time value (the chance that the option may be in the money by expiration).

At the money (ATM): Indicates the stock price and the strike price are the same.

Trade commands: Options can be bought or sold, and you need to specify whether or not you are buying/selling to start a position or buying/selling to end a position. You can end (or close) a position you are currently in by taking the opposite position in the same security. In options lingo, "selling" an option can also be referred to as "writing" an option.

"Trade commands" are needed to communicate clearly with your broker the action to be taken.

BUYING OPTIONS	
Desire	Trade Command
Start/Open	"Buy to open"
End/Close	"Sell to close"

SELLING OPTIONS	
Desire	Trade Command
Start/Open	"Sell to open"
End/Close	"Buy to close"

Open interest: The net number of outstanding open contracts.

- It gives us an indication of volume and liquidity — if open interest is low, we need to be careful in placing our orders, we could move the market and impact pricing. Generally, we really only care about open interest if it is very small (a few dozen contracts).

QUICK CHECK

Before moving on, you should be able to interpret this statement:

Jeff recommends writing five April 2011 $27 call options (covered calls) on **Lowe's** (NYSE: LOW).

Questions:

1. How many shares of stock are in question?
2. What is the expiration date?
3. What is the strike price?
4. What is the proper trade command?

Answers:

1. 500 (five options, each one representing 100 shares)
2. April 16, 2011 (the Saturday following the third Friday)
3. $27 strike price
4. "Sell to open" ("Writing" is also called "selling," and we are starting this position)

Option Premium = Intrinsic Value + Time Value

Think about option prices as the sum of two components: intrinsic value and time value. For this section, use the data in this table to help make this concept clearer:

LEARNING IV AND TV	
Security	Price
Moody's stock	$29.29
Moody's Feb. 2011 $30 puts	$1

LEARNING IV AND TV	
Supervalu stock	$8.66
Supervalu Jan. 2013 $10 calls	$2.05

» Intrinsic value (IV): remember, IV refers to the relationship between the stock price and the strike price.

- It cannot be negative.
- Call option math: IV, call = maximum of [0 or stock price > strike price]
- Put option math: IV, put = maximum of [0 or strike price > stock price]

Example 1: Moody's (NYSE: MCO) is trading at $29.29. You are considering February 2011 $30 put options. What is the intrinsic value of these options?

Example 2: Supervalu (NYSE: SVU) is trading at $8.66. Last week, Jim recommended January 2013 $10 call options. What is the intrinsic value of these options?

Answer 1: IV, put = maximum of [0 or $30 – $29.29 = $0.71], so IV = $0.71

Answer 2: IV, call = maximum of [0 or $8.66 – $10 = -$1.44], so IV = $0

» Time value: remember, we're assigning a $ value to the chance that things will turn out differently by expiration.

- TV math: [TV = quoted option price – IV]
- TV cannot be negative, but it can be zero.
- TV declines as expiration nears, and eventually, it goes away (this is why options are called "wasting assets") because time runs out.
- Think of Time Value like the hope you have when rooting on your favorite football team. Even if your team is behind in the third quarter, you still have hope that they will turn it around in the fourth quarter. But as the end of the game nears, your hope withers away, eventually to zero as time runs out and your team loses the game.

Example 3: The **Moody's** options you are considering (February 2011 $30 put options) are trading for $1. What is the time value of these options?

Example 4: The **Supervalu** options that Jim recommended last week (January 2013 $10 call options) currently trade for $2.05. What is the time value of these options?

Answer 3: TV = [$1 – $0.71 = $0.29], so TV = $0.29

Answer 4: TV = [$2.05 – $0 = $2.05], so TV = $2.05

» More on options as wasting assets:As time moves toward expiration, a portion of the option's price decays (or "wastes" away). With less time, there is less uncertainty.

- Buyers of options have to pay for time value. Sellers of options are paid for time value.
- We sell (or "write") more options than we buy, because we like being paid for our time.

» Key characteristics of IV and TV:

- If an option has no intrinsic value, the entire price is attributable to Time Value. This makes sense because we know the formula [Option price = IV + TV], so if IV = 0, [Option price = 0 + TV]. (See the Supervalu option.)
- The less time remaining until expiration, the lower the TV (remember the Football analogy).
- For options with the same expiration, TV is highest when the strike equals the current stock price.

QUICK CHECK

Before moving on, you should be able to calculate the intrinsic value and time value for this example:

- Stock: **Red Robin Gourmet Burgers** (Nasdaq: RRGB), currently $22.69
- Option: June 2011 $22.50 calls
- Option price: $2.65

Answer:

- Intrinsic value = [max: 0 or $22.69 – $22.50 = $0.19], so IV = $0.19
- Time value = [$2.65 – $0.19 = $2.46], so TV = $2.46

Note: This option has a good bit of time value because it doesn't expire for nearly six months.

Moneyness

Another way to refer to intrinsic value is by expressing an option's moneyness.

- An option is "in the money" (ITM) if it has IV.
- An option is "out of the money" (OTM) if it does not have IV.
- An option whose strike price is equal to the stock price is "at the money."

Example 5: Using the examples above, **Example 1** is ITM while **Example 2** is OTM.

Call Options vs. Put Options

(In Lesson 3, we'll dive deeper and use pictures to help differentiate between calls and puts.)

» Remember that a call option is a bet on the upside of a stock:

- So you would buy a call option if you thought a stock was going higher.

- The price of a call option will increase if the underlying stock does go higher.
- Alternatively, you could sell a call option if you did not think a stock was going higher.

» Remember that a put option is a bet on the downside of a stock:

- So you would buy a put option if you thought a stock was going lower.
- The price of a put option will increase if the underlying stock does go lower.
- Alternatively, you could sell a put option if you did not think a stock was going lower.

If it helps, remember the wonky phrase: **"Call Up, Put Down."**

The Big Quiz

You've read. You've reviewed. But have you learned?

It's time for an options party — a knowledge festival — to check in on what you've been learning. Below are some questions, and a real-world assignment, for you to use as a measuring stick. Further below are the answers. We work on the honor system here, so check yourself after you've given the Big Quiz the "old college try."

QUESTIONS

1. Consider Jeff's prior trade recommendation on **Synaptics** (Nasdaq: SYNA): Write February 2011 $29 puts at $1 or higher. At the time, SYNA traded at $31.01. The option traded at $0.80.

   a. What is the trade command to open this position?

   b. What is the expiration date on the options?

   c. Calculate the intrinsic value and the time value for the option.

   d. Is the option currently in the money, out of the money, or at the money?

   e. If, in six weeks we are happy with our profit on the position, what trade command would we use to tell our broker we want to close the position?

2. What should happen to the time value of an option as it approaches expiration? Why?

3. Jim owns many shoddy restaurant stocks. He learns that the CEO of **Lousy Restaurant** (Ticker: JUNK) has just sold all of his shares. Furthermore, Jim suspects that Lousy Restaurant will struggle to meet its franchise growth goals. But because Jim thinks the company is still a great takeover candidate (private equity firms love to pay big bucks for shoddy restaurants), he doesn't want to sell his shares, but he does wish to use options to protect from a steep decline in share price. Would it make more sense for Jim to buy a put option or buy a call option? Why?

ASSIGNMENT

4. Choose a stock you like and look at three in the money call options prices and three out of the money call option prices for a range of expiration months (February, March and June, for example). Make a table that lists the option, the time to expiration, option price, intrinsic value, and time value. Comment on the results.

ANSWERS

1. For SYNA:

   a. "Sell to open." Writing options is another way to say "selling," and we are just starting this position, so we are "opening" it.

   b. Saturday, Feb. 19, 2011. The expiration date is always the Saturday following the third Friday of every month.

   c. Two parts

i. IV = $0 = [IV, put = max: $0 or strike price - stock price ==> $29 – $31.01 = -$2.01]

ii. TV = $0.80 = [TV = option price – IV ==> $0.80 – $0 = $0.80]

d. Out of the money (it has no IV)

e. "Buy to close." We want to take the opposite position to close our trade, and we "sold to open" to begin our position. "Buy to close" is the opposite of "sell to open."

2. Time value will decline as time passes and reach zero at expiration. Remember, options are known as "wasting assets" and time value captures the uncertainty that things may change. Once we hit expiration, no more uncertainty remains, so time value is zero.

3. It would make more sense for Jim to buy put options. Jim cares about two things: protecting against a big fall and keeping his buyout-related upside. Buying put option gives Jim the right to sell his shares at the strike price, which he would want to do if shares of JUNK plunged. If, instead, shares soared on buyout rumors, Jim would retain the upside of his shares, he'd simply lose out on the cash he paid for the put option. Buying a call option is a bet on JUNK's upside above the strike price. This strategy would retain JUNK's upside but not help protect against the downside.

4. This example shows **Microsoft** (Nasdaq: MSFT), which at the time traded at $28.19:

Call Option	Price	IV	TV
January 2011 $25	$3.21	$3.19	$0.02
February 2011 $25	$3.27	$3.19	$0.09
March 2011 $25	$3.45	$3.19	$0.26
January 2011 $30	$0.03	$0.00	$0.03
February 2011 $30	$0.28	$0.00	$0.28
March 2011 $30	$0.44	$0.00	$0.44

Note: Time value increases, as we would expect, with more time until expiration.

Lesson 2:
Options the Motley Fool Way

Here in Fooldom, we sing a different tune than most investors — especially when it comes to options investing. Lesson 2 provides the theory behind our sheet music. Sure, it may sound like we harp on quantifying what could go wrong, but we've got to be comfortable with the downside before we think about what we may make on the upside.

The Goods

Readings:

» Adding Options to Your Portfolio
http://newsletters.fool.com/50/optionsu/2009/08/10/adding-options-to-your-portfolio.aspx

» Getting Started: How to Build Your Stock-and-Options Portfolio
http://newsletters.fool.com/50/optionsu/2010/05/10/getting-started-how-to-build-your-stock-and-option.aspx

Key Topics:

» Options as a complement: Using options Foolishly boils down to this: Options are derivatives, meaning their value is "derived" from something else: In our case, the underlying stock. So we can't invest with options without having a take on the underlying stock — they're a complement to one's stock research.

» Versatility: Options as a separate allocation: The number and types of strategies we use will vary based on the environment and the underlying stocks. But there's an options strategy for nearly every situation.

» Position sizing: Know how much you can lose, only invest to a degree that you're comfortable with, and live to play another day.

The Foolish Fundamentals

Options as a Complement

Options should complement your long-term stock portfolio.

- Options derive their value based on the underlying stocks — so you shouldn't view options solo.
- *Motley Fool Options* subscribes to the "get rich slowly — but steadily" camp, and uses options to help.
- The number and types of options strategies you use, at any given time, will depend on the market environment and the fundamentals of the stocks you own.

Here are some situations we'll learn how to use options for:

- Building a portfolio
- Fairly valued stocks
- Bullish on a holding
- Bearish on a holding
- Holding is stuck in the mud

Versatility: Options As a Separate Allocation

We've already advocated treating options as a complement in your portfolio. But, we're a motley bunch, so here are some guidelines if you choose to view options as a separate strategy:

» Options for income:

- Devote up to 10% of your portfolio.
- A use of fairly conservative option-income strategies can generate 4-6% added returns.
- Covered calls and written puts are two such strategies.
- Option-income strategies have the added benefit of smoothing out returns.

» Options for hedging:

- Hedge 10-20% of your portfolio using options
- If capital preservation is one of your goals, using options to hedge might suit your needs
- We generally prefer strategies that pay us, so covered calls are a good fit here too, though purchasing OTM puts is a conventional strategy

» Speculating with options:

- Keep it small: up to 2% of your portfolio
- Recognize speculation for what it is: a gamble — only risk as much as you're comfortable losing

Position Sizing

WARNING: In order to put the guidelines that follow to use, I'm introducing a concept not in the reading: Capital at Risk (CaR). It will be vital in future lessons, so learn it well.

How many options contracts should you buy/sell?

1. Calculate your maximum possible loss — or your Capital at Risk (CaR)
2. Calculate the value of the stock holdings underlying your options contracts and check the allocation %
3. Size your position according to the larger of these two numbers.

We'll say the same thing a few different ways:

» Use only as many contracts as you would if you were buying/selling the number of underlying shares.

- 5 contracts = 500 shares

- So, if the stock is $45, the underlying size is $22,500 (500 shares * $45 per share)
- Ask if that position size makes sense for your portfolio size

» Only risk what you're comfortable losing.

Got it? We'll say it another way…

» Calculate your Capital at Risk (CaR): Size your position based on CaR as a percentage of your portfolio.

- Capital at Risk is NOT in the reading — but you need to learn the concept.
- CaR = your maximum possible loss.
- CaR is calculated differently for each option strategy. For example, the maximum loss for a purchased call is the amount you paid for the call.
- You'll see CaR A LOT in future lessons.

REVIEW THIS: CAPITAL AT RISK

It's mean of me to test you on topics not in the reading. Tough cookies — it's coming anyway. Remember; CaR = Maximum Possible Loss.

Note: When calculating CaR, think about the option strategy and consider the maximum you can lose. Then factor in any offsetting option premium you earned up front. The net number is CaR.

Question 1: What is the CaR for a stock you bought for $35 (if you own 100 shares)?

Question 2: What is the CaR written $20 put (if you were paid $2)?

Question 3: What is the CaR for a purchased $50 call (if you paid $6)? If you exercise your call, what would be the value of your stock holding?

Answer 1: Remember, all we're trying to do with CaR is figure out the maximum you can lose. You bought a stock for $35. The worst that can happen is it can go to $0, meaning that your maximum potential loss is -$35 per share. Since you own 100 shares, our max loss is -$3,500 (100 shares * -$35).

Answer 2: Remember, all we're trying to do with CaR is figure out the maximum you can lose. As a put writer, you've promised to purchase shares for $20. The put buyer is happy to sell you shares at $20 only if they have declined below $20. In the worst case, shares could fall to $0 — and you'd still have to buy them for $20. Given that you were paid $2 up front, your maximum loss (CaR) is -$18 per share (-$20 if the stock goes to $0, offset by your $2 put premium payment = -$18), or -$1,800.

Note: If you prefer to ignore the option premium you were paid up front in consideration of CaR, that is perfectly acceptable — a matter of choice. So -$20 per share is also an acceptable answer for CaR in this situation.

Answer 3: As a call buyer you've purchased the right to buy shares at $50 — doing so cost you $6. But if the stock is below $50 at expiration, you don't have to exercise, you'll simply lose the $6 you paid for the call option. So, your CaR is -$600 (-$6 purchased call * 100 shares).

If your calls work out, move above $50 and you exercise, you'll purchase 100 shares at $50, for a total outlay of $5,000 ($50 per share * 100 shares).

Note: Note that the CaR for Question 2 is much larger than the Car in Question 3. As an option seller (Question 2) you are selling upside, retaining downside, and earning income today. As an option buyer (Question 3), you are buying upside, selling downside, and paying cash today. These are the tradeoffs we face as options investors.

If you take the time to understand the risk of each strategy (quantified as CaR) you shouldn't get into trouble with position sizing.

- If you want a lesson on failing to understand CaR, ask Jim to tell you some stories of "put-writing gone crazy."

Here are some more specific guidelines:

» When writing options and buying options:

- Calculate your CaR and the size of the underlying stock position.
- When buying options, you may lose 100% of what you paid, so only bet what you're okay losing.

» For strategies where we're not getting the stock involved:

- You can allocate slightly more than the value of the underlying stock, but don't go crazy.
- "Spreads" are a strategy we'll learn about that fit this mold.

» For speculations:

- Keep it small (< 2%).
- By definition, there's a high likelihood things won't work out, meaning you'll lose 100%.

QUICK CHECK

Before moving on, you should be able to answer this:

Question: Given the following portfolio, calculate the CaR and size of each underlying positions. Comment on the investors sizing decision:

- Total portfolio value: $100,000
- Position 1 — written put: Wrote 15 March $30 puts on ABC for $1.50 each
- Position 2 — purchased call: Purchased 2 June $20 calls on MNO for $3.25 each
- Position 3 — speculation: Wrote 10 February $5 puts on XYZ for $0.10 each

Answer (with a portfolio value of $100,000):

Position	CaR	Math	% of Portfolio
Position 1: Wrote 15 $30 Puts on ABC	-$42,750	(-15 cts * $30 basis if exercised * 100 multiplier) + ($1.50 in put premium * 15 cts * 100 multiplier)	42.75%
Position 2: Bought 2 $20 Calls on MNO	-$650	2 cts * $3.25 purchase price * 100 multiplier	0.65%
Position 3: Wrote 10 $5 puts on XYZ	-$4,900	(10 cts * $5 basis if exercised * 100 multiplier) + (10 cts * $0.10 in put premium * 100 multiplier)	5.0%

Position	Underlying Size	Math	% of Portfolio
Position 1: Wrote 15 $30 Puts on ABC	-$45,000	(-15 cts * $30 basis if exercised * 100 multiplier)	45%
Position 2: Bought 2 $20 Calls on MNO	-$4,000	2 cts * $20 exercise price * 100 multiplier	4.0%
Position 3: Wrote 10 $5 puts on XYZ	-$5,000	-10 cts * $5 exercise price * 100 multiplier	5.0%

Position 1: Position is too large. If the 15 written puts are exercised, we're on the hook to buy stock for $45,000 (even though we have $2,250 in our account for writing puts to help pay for the stock, it still would account for 45% of the value of the total portfolio).

- *Note: it's easy to view writing options as "free money." But be careful, you've sold a promise to buy stock, even if it tanks. Know how much you've promised to buy.*

Position 2: Position size is a-okay. We've purchased the option to buy 200 shares of MNO at $20, which would represent a 4% position in our portfolio.

- *Note: our maximum loss on the options is what we paid for them: $650. If MNO shares are less than $20 at expiration our call options expire worthless — we lose $650. That's a loss of -0.65% of our portfolio — something we can probably overcome.*

Position 3: Position size is too large. We've written puts — way out of the money, by the looks of it. But if shares decline below $5, we'll be on the hook to spend $5,000 on shares. We shouldn't be willing to put up $5,000 of capital against a potential gain of only $100. That would be a return on capital of only 2%, and we know the odds of the speculation working out are slim.

- *Note: We've deemed this position as a speculation, so it shouldn't make up more than 2% of our portfolio.*

The Big Quiz

QUESTIONS

1. [Multiple Choice] According to the *Motley Fool Options* philosophy, options are best suited to be a _____ strategy with respect to your well-researched stock portfolio.

   a. substitute

   b. speculative

   c. complementary

2. [Multiple Choice] If you've done your homework and choose to speculate using options, what is the maximum portfolio allocation you should be willing to risk?

   a. Up to 2%

   b. 5% to 7%

   c. 8% to 10%

3. Calculate the size of the underlying stock position:

   a. You purchase 700 shares of **Western Union** (NYSE: WU), and shares trade at $19.25.

   b. You wrote five May 2011 $18 puts on Western Union and were paid $0.75 per contract. (Shares trade at $19.25.)

   c. You purchased 10 January 2013 $30 LEAP Calls on **UnitedHealth Group** (NYSE: UNH) for $12 per share. (Shares trade at $40.77.)

4. Calculate the Capital at Risk (CaR) for each of the positions in question 3.

5. Apply the above examples to your personal portfolio and comment on the position sizes relative to your own capital.

6. Review: Determine whether the WU puts and UNH LEAP calls (from question 3 above) are in the money, out of the money, or at the money.

ASSIGNMENT

7. Let's say Jeff has suggested buying January 2013 $15 LEAP calls on Intel (Nasdaq: INTC) in a recent Trades You Can Make. Determine the number of LEAP call contracts you would purchase for your portfolio if you wanted to establish an underlying exposure of 3% to 7% in Intel stock.

ANSWERS

1. C, complementary. Remember, options derive their value based on the underlying stocks, so you shouldn't view options solo. They are a complement to your long-term stock portfolio.

2. A, up to 2%. Recognize a speculation for what it is: a gamble. We don't advise risking too much of your hard earned capital (up to 2%). In any case, you should only risk as much as you're comfortable losing.

3. The value of the underlying position:

   a. $13,475 = [700 shares * $19.25 per share]

   b. $9,000 = [5 contracts * 100 shares per contract * $18 potential buy price]

   c. $30,000 = [10 contracts * 100 shares per contract * $30 potential buy price]

4. The Capital at Risk for each position:

   a. -$13,475. If you own WU shares, the worst possible outcome is that the shares fall to $0. In this case, you lose the entire amount you invested, or $13,475.

b. -$8,625 = [-$9,000 loss if WU shares go to $0 + $375 in earned put premium]. If you've written puts, you have sold a promise to purchase shares at the $18 strike price if the option holder exercises. If WU shares go to $0, your put options will be exercised and you must purchase 500 shares (you wrote 5 contracts) at $18. With the shares at $0 you've lost $9,000. However, since you earned $375 [$0.75 per contract * 5 contracts * 100-share multiplier] in put option premium, that helps offset your maximum loss.

c. -$12,000 = [10 contracts * 100-share multiplier * -$12 per call option . Since you have purchased call options, you have purchased the right (not the obligation) to exercise and buy shares. If you choose not to exercise your options, you'll simply lose the amount you paid for them: $12,000.

5. Answers will vary. For a hypothetical $200,000 portfolio, the WU stock position (700 shares) is probably too large. At 6.7%, it consumes a lot of capital and concentrates risk. The written puts on Western Union represent a $9,000 position and a 4.5% allocation. This position is more reasonable, but may be too high for more conservative investors. The United Health LEAP calls represent a 15% position — too large for a $200,000 portfolio.

Remember: Know the size of your underlying positions. Know how much you can lose. Only risk as much as you're comfortable losing.

6. We're concerned with whether or not the option has intrinsic value or not. If you need to review this concept, brush up on Lesson 1.

a. WU $18 put is OTM — the strike price ($18) is below the stock price ($19.25)

b. UNH $30 LEAP call is ITM — the strike ($30) is well-below the stock price ($40.77)

7. Answers will vary

Lesson 3: Basic Strategies

Options investing isn't hard! There are really only four things you can do: buy calls, buy puts, sell calls, and sell puts. Master these, and the crazy permutations thereafter will be much simpler to grasp. I'll help out by highlighting the *Stuff You'd Better Know*.

The Goods

Readings:

» Options for Beginners
http://newsletters.fool.com/50/optionsu/2009/08/10/options-for-beginners.aspx

Key Topics:

» Buying call options

» Buying put options

» Selling covered calls

» Selling put options

The Foolish Fundamentals

Know This First!

Direction: the direction that allows for maximum profits (bullish, bearish, or neutral)

Maximum risk: the most you can lose — also known as Capital at Risk (CaR)

Maximum reward: the reason we play the game — the most we can make using the strategy

Breakeven price: the stock price (or prices) at which the strategy begins to be profitable.

Remember:

» When you buy an option, you are said to be:

- Long the option
- The option holder/owner

» When you sell an option, you are said to be:

- Short the option
- The option writer

Buying Call Options

What Is It?

Gives you the right to buy the underlying stock at the strike price, up until the expiration date.

Why Would We Do It?

- You think a stock is going to rise by the expiration date.
- To bet on a stock using less capital than buying shares directly.
- You want to leverage analysis you've done on a stock.

Stuff You'd Better Know

Direction	*Bullish*
Underlying position size	*[# contracts * 100 share multiplier * strike price]*
Maximum risk	*Call premium*
Maximum reward	*Unlimited: This happens if the **stock goes to $infinity***
Breakeven	*[strike price + call premium]*

Tips & Tricks

» If your timing is wrong, you could lose your entire investment. When you are an option buyer, you have to be right in your directional bet and your time frame.

» In *Motley Fool Options*, we tend to buy longer-term call options (so our thesis has plenty of time to be proven right) on stocks that we think are undervalued.

Buying Put Options

What Is It?

Gives you the right to sell the underlying stock at the strike price, up until the expiration date.

Note: As an option buyer, we have an initial cash outflow.

Why Would We Do It?

» You think a stock is going down by the expiration date.

» To short a stock: to bet against a stock with less Capital at Risk than shorting the shares directly.

» To protect a stock: to hedge an anticipated decline in a stock you already own.

Stuff You'd Better Know

Direction	*Bearish*
Underlying position size	*[# contracts * 100 share multiplier * strike price]*
Maximum risk	*Put premium*
Maximum reward	*[strike price – put premium]: This happens if the stock goes to $0*
Breakeven	*[strike price – put premium]*

Tips & Tricks

» You've got to get the timing right here too — if the stock doesn't fall by the expiration date you're out the cost of the put.

» Consider buying a put option if you've identified a catalyst that you expect will impact a stock (a competitor launching a competing product, an adverse FDA announcement, etc.).

Selling Covered Call Options

What Is It?

A means of collecting "rent" (income) in exchange for the upside of a stock you already own — it's got two parts:

- Long 100-share blocks of the underlying stock
- Written call option

Note: As an option seller, we have an initial cash inflow.

Why Would We Do It?

» For income: to generate "rent" (income) on a stable stock you own.

» For defense: to lessen the impact of temporary price declines on a stock you own.

» For a better sell price: If you know the price you're willing to sell at, you can get paid to wait and improve your net sale price when exercised.

Note: Writing covered calls is a versatile strategy, but understand no matter what, it involves foregoing the upside above the strike price you choose.

Stuff You'd Better Know

Direction	*Neutral/Bullish*
Underlying position size	*[# contracts * 100 share multiplier * strike price]: though you already own the shares*
Maximum risk	*[stock price – call premium]: This happens if the stock goes to zero.*
Maximum reward	*[(strike price – stock price) + call premium]: you get capital appreciation, up to the strike, plus the call income*
Breakeven	*[strike price – call premium]*

Tips & Tricks

» The trade command to initiate a covered call is two part:

- Buy the stock
- "Sell to open" the call option

» In order for your broker to consider a written call "covered," all shares must be held in the same account (so having 60 shares in your IRA and 40 shares in a taxable account won't jive).

» If you initiate a position simply because it has attractive covered call characteristics, it's referred to as a "buy/write" strategy.

Selling Put Options

What Is It?

In exchange for up-front income, you've sold the promise (obligation) to purchase 100-share blocks of the underlying stock at the strike price up until expiration.

Note: You've essentially sold insurance to the stockholder: if the stock drops below the strike, you "insure" additional losses by promising to buy their shares.

Why Would We Do It?

» For income: to generate "rent" (income) on a stable stock you do not own.

» To build a position: to get paid while you wait to buy a stock at a better price.

*Note: **The #1 rule in put-writing:** Only write puts if you're willing and able to own the underlying stock (in the quantity you've promised — know your exposure!*

Stuff You'd Better Know

Direction	*Bullish*
Underlying position size	*[# contracts * 100 share multiplier * strike price]*
Maximum risk	*[strike price – put premium]: this happens if the stock goes to zero*
Maximum reward	*Put premium*
Breakeven	*[strike price – put premium]*

Tips & Tricks

» The trade command to initiate a covered call is "sell to open."

» Put writing is a naked option strategy, so your broker will require a higher level of options approval. However, if you engage in cash-secured put writing, you may be able to use the strategy in your retirement account.

» Writing OTM puts may seem like free money. It isn't — always know the size of the promise you've made.

- See Jim's 1/21/2011 Options Weekly: http://newsletters.fool.com/50/coverage/weekly/2011/01/21/options-weekly-why-we-do-what-we-do.aspx

The Big Quiz

QUESTIONS

1. Define the direction of the following recommendations (bullish, bearish, neutral, or some combination):

   a. On Oct. 23, 2009, Jeff recommended purchasing January 2012 $17.50 LEAP call options on **Intel** (Nasdaq: INTC) with the shares trading at $20.

   b. On Nov. 1, 2010, Jim recommended writing January 2011 $7.50 put options on **Infinera** (Nasdaq: INFN) with shares trading at $8.19.

   c. On Oct. 26, 2010 Jeff recommended writing January 2011 $42.50 covered calls on **Exelon** (NYSE: EXC) with shares trading at $41.35.

2. For each of the trade recommendations above, discuss what the prevailing logic might have been to justify your answer in Question 1.

3. I own 100 shares of **Logitech** (Nasdaq: LOGI), split between my IRA (60 shares) and taxable account (40 shares). When I try to enter a "sell to open" order for one call option, my broker does not let me transact? Why?

4. Explain why writing put options is like selling insurance.

ASSIGNMENT

5. It's easy to think that writing puts is "free money" — but we've already learned that the #1 rule to writing puts is "know your exposure," or your CaR.

   a. Choose an active written put trade from Jeff or Jim's scorecard and calculate the CaR for writing 12 contracts. Use the bid price of the option cited in the recommendation in your calculation.

   b. Determine what a more appropriate position size (how many contracts) would be for your portfolio. If you need a refresher on CaR, review Lesson 2.

   c. For extra credit, calculate the CaR for all active written-put recommendations on the *Motley Fool Options* scorecard.

ANSWERS

1. Remember, direction refers to the general performance direction expected that allows for maximum profits. The direction each trade was assuming was:

   a. Bullish

   b. Bullish (Neutral / bullish also acceptable)

   c. Bullish (Neutral / bullish also acceptable)

2. Answers may vary, but something close to this should work:

   a. Purchasing a call trades an up-front payment (call premium) in exchange for the upside of a stock above the strike price. It will therefore be most profitable when shares of the underlying stock rise, so its direction is bullish. Jeff probably chose to purchase the call option to limit his capital at risk (the amount paid for the call) and because he expected shares to rise by the expiration date. He probably chose a long-dated option (a LEAP call) so that he had as much time as possible to have his investment thesis play out.

   b. Writing a put option is typically done for one of two reasons: to earn income without owning the stock, or to establish a position at a better (lower) price. With the information given, Jim could have recommended this trade for either reason, but probably did so for both reasons. With shares of Infinera trading above the strike price, he's likely thinking that he'd be happy to own shares if they dipped to $7.50, but if they don't (if shares rise or flat-line), he'd be happy to earn the put premium instead.

   c. While we can't truly tell from the facts given whether Jeff's Exelon recommendation was purely for income, for defense, or for a better sell price, it's safe to assume that income is a driving factor. Given that the option Jeff recommends is out of the money ($42.50 strike), he is probably mildly bullish on Exelon shares, but wouldn't mind selling if the shares reached $42.50.

3. A covered call has two components: ownership of stock (in 100-share blocks) and a written call. Your broker views these components together, as low-risk, because the obligation created by writing the call option is "covered" by your holding in the underlying stock. If your ownership of the shares are split between accounts, your broker does not consider the call to be covered, rather, it considers it to be a "naked call" with unlimited risk.

4. When you write (sell) a put option, you have sold the obligation to purchase shares, at the strike price, by the expiration date in exchange for premium up front. The owner (buyer) of the put option, will profit on the option if the underlying shares decline in value below the strike price. If this happens, they will exercise their put option and make you purchase shares at the strike price, therefore transferring the downside share performance to you.

When you purchase health insurance, you're paying a premium up front for the right to transfer the cost of your future health expenses to the insurance companies. If you spend serious time in an hospital, you effectively exercise your put option, making the insurance company foot the bill for your expenses (the downside, in your case). If you don't have big healthcare expenses, your option expires worthless and you lose the premium you paid. Get well soon, Fool.

5. Jeff's scorecard has two written put recommendations: **Synaptics** (Nasdaq: SYNA) and **Open Text** (Nasdaq: OTEX). Jim's scorecard has two written put recommendations: **Guess** and (NYSE: GES), **Moody's** (NYSE: MCO).

Option Recs	*Strike*	*Premium received*	*Exposure, 1 contract*	*CaR, 12 contracts*
RVBD Jul11 $32 puts	*$32*	*$0.97*	*-$31.03 * 100 = $3,103*	*-$3,103 * 12 = -$37,236*
OTEX Aug11 $60 puts	*$60*	*$4.25*	*-$55.75 * 100 = $5,575*	*-$5,575 * 12 = -$66,900*
BPI Nov11 $20 puts	*$20*	*$2.08*	*-$17.92 * 100 = -$1,792*	*-$1,792 * 12 = -$21,504*
NVDA Sep11 $17 puts	*$17*	*$1.59*	*-$15.41 * 100 = -$1,541*	*-$1,541 * 12 = -$18,492*

Appropriate position sizes for your own portfolio will vary. Answers also will vary depending on when you answer these questions.

Lesson 4:
Selling vs. Buying Options

Lesson 3 taught you the "what," and now we tackle the "why" — at least the beginnings of the "why." Pay special attention to the Tips & Tricks sections for practical advice that will be explained in greater detail in the Intermediate degree.

The Goods

Readings:

» Getting Started: Why We Write
http://newsletters.fool.com/50/optionsu/2010/05/10/getting-started-why-we-write.aspx

» Getting Started: Buying Options
http://newsletters.fool.com/50/optionsu/2010/05/10/getting-started-buying-options.aspx

» Getting Started: Determining Your Time Frame
http://newsletters.fool.com/50/optionsu/2010/05/10/getting-started-determining-your-time-frame.aspx

Key Topics:

» The players: buyers and sellers

» Pros and cons of writing options

» Pros and cons of buying options

» Choosing a time frame

Note: In the Intermediate Degree, we will outline more specific guidelines for choosing one option over another

The Foolish Fundamentals

Option Sellers and Option Buyers

Option Seller: Option sellers are also known as "option writers." As an option writer, you do not own the option contract — you are getting paid in return for taking on the obligation outlined in the contract.

- Cash inflow
- Known immediate benefit
- Unknown potential future obligation
- To **start** a position: "sell to open"
- To **end** a position: "buy to close"

Option Buyer: As an option buyer, you own the option contract — you have paid for the right to exercise the terms outlined in the contract.

- Cash outflow
- Unknown potential future benefit
- Known cost (potential loss)
- To **start** a position: "buy to open"
- To **end** a position: "sell to close"

Note: Options investors do not care who the actual buyer or seller is on the opposite side of their position. The Options Clearing Corporation (OCC) removes counterparty risk (the chance that your counterparty won't live up to the terms of the options contract) by guaranteeing all options contracts. The OCC is an independent entity that issues and guarantees all listed options contracts. The website: www.optionsclearing.com.

The Pros and Cons of Writing Options

Keys to Remember:

» Every option you write is a potential obligation:

- **Put option:** a potential obligation to buy 100 shares at the strike price, so be prepared
- **Call option:** a potential obligation to sell 100 shares at the strike price, so be prepared

» Because a written option represents a potential obligation, its value shows up as a negative on your brokerage account statements.

- Because you are paid cash right away, your cash balance increases.
- The value of your options will change over time, causing your balance to fluctuate.
- For a written put: If the underlying stock rises markedly, the negative balance will decrease reflecting a lower probability of the obligation coming to fruition (and vice versa).
- For a written call: If the underlying stock rises markedly, the negative balance will increase reflecting a higher probability of the obligation coming to fruition (and vice versa).
- If your option expires out-of-the-money (OTM), it's value reaches zero at expiration, erasing the negative balance and leaving you with your increased cash balance (the amount of premium).

Pros	*Cons*
You are paid cash up front.	*You forego upside beyond the strike price (capped gain).*
You have time on your side -- time value erodes, making the cost to close your position potentially cheaper.	*Your downside could be extreme.*
You almost always have recourse.	
Strategies are easy to repeat or alter.	

The Pros and Cons of Buying Options

Keys to Remember:

» Every option you buy represents the right to the profits of an underlying stock if it moves in the direction you've chosen.

- **Put option:** the right to the downside (below the strike price) of 100 shares
- **Call option:** a right to the upside (above the strike price) of 100 shares

» Because a purchased option represents the right to the profits of the underlying stock (in the direction you've chosen), its value shows up as a positive on your brokerage account statements.

- Because the option cost you cash up front, your cash balance declines by the amount you paid in premium.
- The value of your options will change over time, causing your balance to fluctuate.
- For a purchased put: if the underlying stock rises markedly, the positive balance will decrease reflecting a lower probability that the downside you are betting on will come to fruition (and vice versa).
- For a purchased call: If the underlying stock rises markedly, the positive balance will increase reflecting a higher probability that the upside you are betting on will come to fruition (and vice versa).
- If your option expires out-of-the-money (OTM), it's value reaches zero at expiration, erasing the positive balance.

Pros	Cons
Potential profits are unlimited *(well, almost: Purchased puts are bounded by zero).*	*You pay for time value, which declines over time and erodes the value of your option.*
Losses are limited to the amount you invest.	*It is easy to lose 100% of your investment.*
Leverage: You can control 100 shares of stock for much less capital than buying shares outright.	*Paying money upfront raises your* ***hurdle to making a profit.***
You can earn a leveraged profit *with a fairly small move (in the direction you have chosen) by the underlying stock.*	

Tips & Tricks

» To give yourself an advantage when buying options:

- **Buy deep ITM calls** (strike price is well below the stock price). This decreases the chance that you lose 100% of the premium you've invested — your option will is likely to have some intrinsic value remaining at expiration even if the underlying shares decline.
- **Buy deep ITM puts** (strike price is above the stock price). Even if shares rise your option is likely to have some intrinsic value remaining at expiration.
- **Buy LEAPS.** You give yourself the most time possible (given the option expirations available) for your belief on the underlying to play out.

Choosing Your Time Frame

The two most important factors when investing using options are the exercise price on the underlying option and how much you pay (or are paid) to trade the option. Choosing the right time frame is third on the list.

Note: Longer-dated options will cost more than shorter-dated options because there is more time for circumstances (and the price of the underlying stock) to change.

When buying options:

»You usually want as much time as possible to be proven correct.

» You pay more for longer-dated options.

- Consider calculating Time Value per Day [TV / days until expiration] or Time Value per Month [TV / months until expiration]for the options you are considering
- Use TV per day or month as an input in your consideration

» Choose the longest-dated option that has a price you're willing to pay (the maximum you are willing to lose).

- If you can identify a catalyst that may impact the stock within that time frame, that can help guide your decision.
- The price of time value (TV per day or month) actually declines when you speak in terms of years (LEAP options) compared to months (shorter-dated options), so you may find longer-term options are less expensive than you would have thought.

When selling options:

» Time value decays at an accelerated rate as expiration nears, meaning that option writers profit more quickly with short-dated options (provided that other factors stay the same).

- Because of the rate of decay in time value, it is generally more profitable to write two short-dated options as opposed to one long-dated option.
- For example, writing back-to-back three month options usually pays better than writing one six month option.

» As an option writer, potential catalysts (such as earnings announcements or dividend payments) occurring near an expiration date can cause unexpected assignments.

- If an option buyer wants an upcoming dividend payment, they may exercise their option early if:

    a. The dividend is attractive

    b. The option is close to being ATM (or is ITM)

    c. Expiration is near

Once you've chosen an expiration date, you aren't locked in. If you'd like to alter the expiration date, you can:

» Close your existing position by entering into the exact opposite trade

» Initiate a new position with the new expiration date you want.

- If you extend the expiration date, you are said to "roll out" your option
- If you shorten the expiration date, you are said to "roll in" your option

The Big Quiz

QUESTIONS

1. Match each of the letters below with either: I. Option Seller or II. Option Buyer

   a. Receives a cash inflow

   b. Pays a cash outflow

   c. Has a potential future obligation

   d. Knows the maximum potential loss

   e. "Owns" the option

2. Buyers of options pay for time value.

   a. What does this mean?

   b. Why is it a hurdle for option buyers?

   c. What is a way to combat having to pay for time value?

3. State the trade commands ("buy to open" for example) for the following options recommendations :

   a. A while back, Nick suggested setting up a diagonal call on **Wal-Mart** (NYSE: WMT). The recommendation has two legs:

      i. Buy January 2013 $45 calls

      ii. Write March 2011 $57.50 calls

   b. Jeff recommended owning January 2012 $17.50 LEAP calls on **Intel** (Nasdaq: INTC).

   c. Jim recommended writing a covered strangle on **Red Robin Gourmet Burgers** (Nasdaq: RRGB). The recommendation has two option legs:

      i. Write March 2011 $20 puts

      ii. Write March 2011 $22.50 calls

4. We know that we can close our options positions by initiating the opposite trade. State the trade commands necessary to **close** each of the positions in Question 3.

ASSIGNMENT

5. Calculate the time value per day, or per month, for several expiration months for **Intel** (Nasdaq: INTC) $20 call options. Comment on your findings.

ANSWERS

1. I. Option Seller: a, c

   II. Option Buyer: b, d, e

2. Something along these lines:

   a. An option's price consists of two components: intrinsic value and time value. Time value represents the price paid attached to the potential for change (in the price of the underlying stock) by the expiration date. All options, prior to expiration, have time value. When someone buys an option, they must pay for the time value.

   b. Paying for time value represents a cash outflow, and signifies money that must first be made back before a position can be profitable. In other words, option buyers start "in the hole."

   c. One way to combat having to pay for time value is to purchase deep ITM options.

3. The trade commands are as follows:

   a. Wal-Mart:

      i. "buy to open" January 2013 $45 LEAP calls

      ii. "sell to open" January 2011 $57.50 calls

b. Intel: “buy to open” January 2012 $17.50 LEAP calls

c. Red Robin Gourmet Burgers:

i. “sell to open” March 2011 $20 puts

ii. “sell to open” March $22.50 calls

4. The trade commands to close are as follows:

a. Wal-Mart:

i. “sell to close” January 2013 $45 LEAP calls

ii. “buy to close” January 2011 $57.50 calls

b. Intel: “sell to close” January 2012 $17.50 LEAP calls

c. Red Robin Gourmet Burgers:

i. “buy to close” March 2011 $20 puts

ii. “buy to close” March $22.50 calls

5. And for the assignment: If Intel shares are currently trading for $21.20, here’s what your answers might look like. I have assumed the midpoint between the bid and the ask for the option price.

Time Value Per Day:

Option	Price	Int. Value	Time Value	Days Until Exp.	TV/Day
Feb11 $20 C	*$1.22*	*$1.20*	*$0.02*	*19*	*$0.0011*
Apr11 $20 C	*$1.50*	*$1.20*	*$0.30*	*74*	*$0.0041*
Jul11 $20 C	*$1.85*	*$1.20*	*$0.68*	*165*	*$0.0039*
Jan12 $20 C	*$2.40*	*$1.20*	*$1.20*	*354*	*$0.0034*
Jan13 $20C	*$3.20*	*$1.20*	*$2*	*718*	*$0.0028*

Time Value Per Month (Months = days/30):

Option	Price	Int. Value	Time Value	Months Until Exp.	TV/Month
Feb11 $20 C	*$1.22*	*$1.20*	*$0.02*	*0.6*	*$0.0333*
Apr11 $20 C	*$1.50*	*$1.20*	*$0.30*	*2.5*	*$0.1216*
Jul11 $20 C	*$1.85*	*$1.20*	*$0.68*	*5.5*	*$0.1182*
Jan12 $20 C	*$2.40*	*$1.20*	*$1.20*	*11.8*	*$0.1017*
Jan13 $20C	*$3.20*	*$1.20*	*$2*	*23.9*	*$0.0836*

Your answers will vary depending on the option price, stock price, and days until expiration you used.

Buying Calls

WHY BUY CALLS:

- You believe a stock has a strong catalyst for appreciation over the coming months or few years.
- You want to benefit from a stock's upside, but put less capital at risk than buying the stock outright.
- You want to leverage your bullish expectations on a stock you already own.

Buying ("buy to open") call options is a lot like purchasing stock: You believe that a company you understand well will grow in value over a certain period of time, and you want to generate a profit from it. When you buy a call, you have the right to buy the underlying stock at a set price (the strike price) by a specified date (the expiration date). If the stock price goes up, the value of its calls will too, especially the options with strike prices near the current share price. Just as when you buy a stock, your maximum potential loss is the amount you invest — in this case, the premium you pay for the calls.

Of course, this brings up a logical question: Why not just buy the underlying stock outright? The main reason is to take advantage of controlled leverage. This leverage can magnify your results dramatically and, if you buy calls Foolishly, put less of your capital at risk. We'll show you how with an example.

A CALL IN ACTION

Ideal candidates for buying calls are usually companies with (1) stocks that are significantly mispriced and (2) a catalyst (strong earnings, big news such as a merger or new product launch, and so forth) that can help unlock greater value prior to expiration. For example, assume a business you know well has had its stock crushed and now trades at $15 a share. You believe that once the market recognizes the overreaction, the stock will quickly recover. Prior to learning about options, you might have been willing to invest $3,000 in this idea, buying 200 shares at $15 apiece. Instead, let's suppose that the $15 calls (using a strike price that's the same as the underlying stock's price for increased value) that expire in 17 months (the furthest date available) are trading for $2.90. Here, by just buying two call contracts — each representing 100 shares — you can profit from the same number of shares for only $580 ($2.90 x 2 x 100), thus risking much less capital.

But how much can you gain — or lose — with this investment? To better understand how buying calls works, let's think of this example in terms of maximum profit, maximum loss, and breaking even.

YOUR MAXIMUM PROFIT WHEN BUYING CALLS

In theory, there's no limit to how high a stock price can go — and in turn, call options can have unlimited profit potential. But, while that would be a spectacular outcome, let's stay grounded.

Suppose your thesis proves true, and the stock moves up modestly, to $21 a share in six months. In this more realistic scenario, your options would likely be worth around $7. Multiply that $4.10 increase by 200 (two contracts representing 100 shares each), and you're sitting on an $820 gain. That's right: You've made 141% for only six months work. If you had purchased the stock, you'd be up 40% — still respectable, but a much smaller gain. Isn't controlled leverage fun?

THE OTHER SIDE: YOUR MAXIMUM LOSS WHEN BUYING CALLS

Of course, there's a flip side: Leverage makes losses occur more quickly. Fortunately, when purchasing an option, your maximum loss is limited to the premium you've paid — that's why we refer to it as controlled leverage. In our example, your maximum loss is only $580, whereas the stock investor has $3,000 on the line. Of course, while the stock would need to drop to $0 for the stock investor to lose the entire investment, the same isn't true for us as the options investor — but that's one of the reasons we put less capital on the table to begin with.

Suppose your thesis doesn't play out, and on the options' expiration date, the underlying stock sits below your $15 strike

price. The calls will expire worthless, and you'll lose your entire $580 investment. But these losses don't happen all at once at expiration; they occur over the life of a call contract (called "time decay"), which is why you can lose your investment so swiftly. Six months into our 17-month contract period, let's say the stock dropped all the way to $13 a share. The stock investor would show a $400 loss. The option would likely be worth about $1.25, so you would show a smaller $330 loss. So although you'd already have lost much of your initial investment, you put less money on the table to begin with. This is the principal reason why we like to risk less capital: turbo-charged upside with a similar downside.

It usually makes sense to exit a losing position before the expiration date in order preserve some capital, but sometimes an option loses so much value that selling it makes little sense. To be safe, you need to be prepared to accept a full loss.

BREAKING EVEN

Just like it sounds, an options strategy's break-even point is where the stock price needs to be at expiration for you to neither make nor lose any money. When you buy a call, the break-even point is the strike price plus the premium you paid. In our example, that's $15 (strike price) plus $2.90 (premium), so your break-even price would be $17.90. A good frame of reference here is to only buy a call option if you think the stock will at least achieve this break even performance — though of course, hopefully, you'll do much better.

WHICH CALL SHOULD I BUY?

Here are a few guidelines that will help you when you're buying calls:

- The option should be on a business that (1) you know well, (2) you have good reason to believe is worth much more than its current stock price, and (3) has a catalyst that should help the stock reach your fair value estimate prior to the option's expiration date.
- When choosing an expiration date, make sure to allow enough time for your catalyst to pan out. These things sometimes take longer than expected, so it can be wise to use options that expire as far out as possible.
- Don't overleverage — you'll be risking a very large loss. Only purchase enough contracts to cover the same number of shares you'd be purchasing as a long stock position. For example, if you'd be purchasing 300 shares, stick to just buying three contracts. This will cost significantly less money than a stock purchase (if the dollar amount you'd be investing is close to equal, you're buying too many options).
- When it comes to strike prices, you have two choices: Buy a deep in-the-money call (meaning the strike price is well below the stock price — at the very least, 10%) that will cost more, but that lets you more easily convert the calls to stock if you need more for your catalyst to play out. Or you can buy an out-of-the money call that will cost less, but that increases your odds of losing your whole investment if the stock doesn't increase above the strike price. Use whichever strategy you're more comfortable with in each case.

THE BOTTOM LINE ON BUYING CALLS

Buying calls is a straightforward option strategy that lets you leverage a bullish stock idea, in a shorter period of time, while putting less capital at risk than buying the stock outright. The strategy works best if you expect the stock to go up within a defined time frame and — even better — if it has an expected catalyst. You have unlimited upside when you buy calls; however, as with any option purchase, if it works against you, must be prepared to lose what you paid for the options. Stay tuned as we discuss ways to pair long calls with other option strategies, including ways to take away the sting of loss. Questions? Visit our discussion boards!