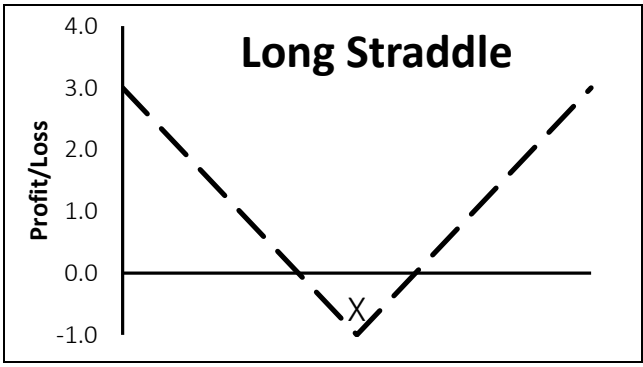
# Options 2

You've recently joined a hedge fund that employs complex options trading strategies that are used to exploit mispricing in options markets. Specifically, your hedge fund's strategy is to buy or sell options when they believe that the market will be more or less volatile than the current market expectations.

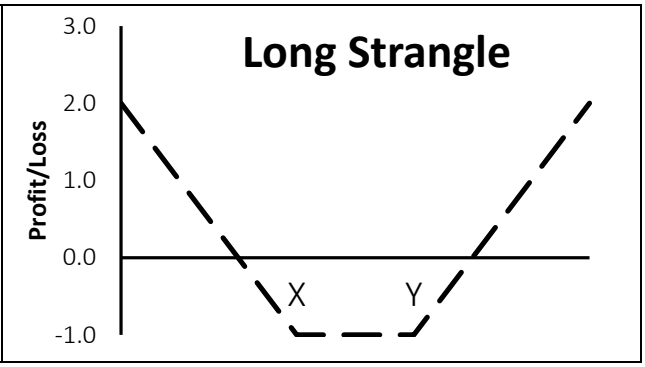
Given that you are relatively new at this strategy, your responsibility is to provide the execution of the trades passed down from the hedge fund principals. At the start of each month, they will give you instructions as to whether they wish to buy or sell a specific straddle, strangle, butterfly, or condor. Your responsibility is to build the desired options position by buying or selling the appropriate put and/or call options associated with the underlying.

You're very eager to prove your abilities and hope to be taught more about the volatility modeling element of the hedge fund strategy in the coming months. For now, you've decided to review options payoffs and found a quick reference to the options strategies (and their components) that you will be asked to implement.

($X refers to the strike price. A short position in any of these strategies would simply use the opposite direction of trades- i.e. short calls instead of long calls or vice versa)

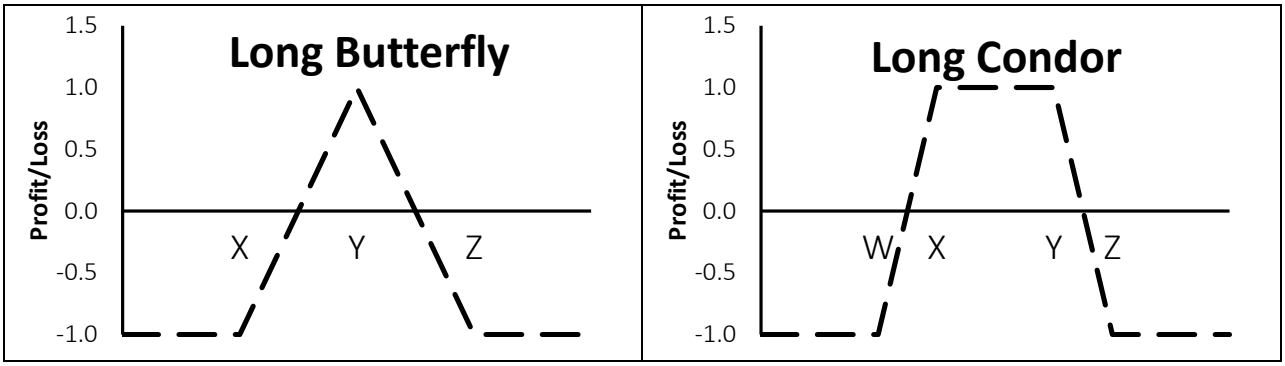



Long $X Straddle: Long Call and Long Put with strike of X




Long $X-$Y Strangle: Long $X Put and Long $Y Call, where X < Y.

*Kevin Mak* and Tom McCurdy** prepared this case for the RIT market simulation platform, http://rit.rotman.utoronto.ca/.*
**Manager of the Financial Research and Trading Lab, Rotman School of Management;*
***Professor of Finance and Founding Director of the FRTL, Rotman School of Management, University of Toronto.*




Long $X-$Y-$Z Butterfly:

Short Straddle (strike $Y) plus buy the wings:
Long Put at strike $X and Long Call at strike $Z

Long $W-$X-$Y-$Z Condor:

Short Strangle (strikes $X and $Y)
Long $W Put and Long $Z Call

Options Strategies Simulation #2 – O2

When this case begins, you will receive a message instructing you to build a specific options position. You will have three minutes to buy and sell any of the options for Cardingdale Group PLC (CG). These three minutes represent the beginning of the month, and prices will be static for the entire 3 minutes. Following this time, trading will close and CG's price evolution will occur following a random walk.

The objective of this case is not to generate profits, but rather, to be able to accurately build options positions as directed to do so by your portfolio manager.

At the end of the case, you will be informed of the 'correct P&L' that you should have had (assuming that market orders only have been used). If your 'realized P&L' matches the 'correct P&L' messaged from the server, you have successfully built the options positions according to your portfolio manager's directions.

Discussion Questions and Follow Up:

There are multiple methods to build butterflies, using all calls, all puts, or a combination of calls and puts. What are they?