

3. (15%) Check the following combinations of calls and puts, and determine whether they conform to the put-call parity. If you see any violations, suggest an arbitrage strategy. Assume that these options as European options.
 - a. April 55
 - b. June 60
 - c. Sept 65
4. (5%) Buy 100 shares of BMO stock and write one Sept 65 call contract. Hold the position until expiration. Determine the profits and graph the results. Identify the two breakeven stock prices and the maximum profit and maximum loss.
5. (5%) Buy 100 shares of BMO stock and buy one JUN 60 put contract. Hold the position until expiration. Determine the profits and graph the results. Identify the two breakeven stock prices and the maximum profit and maximum loss.
6. (5%) Construct a bear spread using the Jun 55 and 65 calls. Determine the profits at expiration and graph the results. Identify the breakeven stock price and the maximum and minimum profits at expiration.
7. (10%) Suppose that you are expecting the stock price to move substantially over the next six months. You are considering a butterfly spread using the SEP 55, 60, and 65 calls. Hold the position until expiration. Determine the profits and graph the results. Identify the two breakeven stock prices and the maximum and minimum profits.
8. (10%) Construct a long straddle using the SEP 65 options. Hold the position until expiration. Determine the profits and graph the results. Identify the two breakeven stock prices and the maximum and minimum profits.
9. (10%) A strap is consisting of buying two calls and selling one put. Construct a long strap using the SEP 65 options. Hold the position until expiration. Determine the profits and graph the results. Identify the two breakeven stock prices and the maximum and minimum profits. Compare the results with the SEP 65 straddle.