Name:

57. Use put-call parity to relate the initial investment for a bull spread created using calls to the initial investment for a bull spread created using puts.

Relation is

58. Suppose that put options on a stock with strike prices \$30 and \$35 cost \$4 and \$7, respectively. How can the options be used to create (a) a bull spread and (b) a bear spread? Graph the profit function for both spreads. For both spreads, give the range of stock prices that would lead to a positive profit.

Create bull spread by doing the following:

Create bear spread by doing the following:

Profit is positive for

S_T (bull)

S_T (bear)

59. Three put options on a stock have the same expiration date and strike prices of \$55, \$60, and \$65 and market prices \$3, \$5, and \$8. Explain how a butterfly spread can be created. Graph the profit function from the strategy. For what range of stock prices would the butterfly spread lead to a gain?

Create butterfly spread by doing the following:

Profit is positive for $< S_T <$

60. Use put-call parity to show that the cost of a butterfly spread created from European puts is identical to the cost of a butterfly spread created from European calls.

Relation is

61. A call option with a strike price of \$50 costs \$2. A put option with a strike price of \$45 costs \$3. Explain how a strangle can be created from these two options. Graph the profit function from the strangle. For what range of stock prices would the strangle lead to a loss?

Create strangle by doing the following:

Profit is negative for $< S_T <$