59. Show that $K \leq K'$ and $0 < \alpha < 1$ imply $p(\alpha K + (1-\alpha)K') \leq \alpha p(K) + (1-\alpha)p(K')$.
60. Calculate and draw a bull put spread's profit function.
61. 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.
62. 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 bear spread and (b) a bull spread? Illustrate the profit and payoff for both spreads.
63. 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. Illustrate the profit from the strategy. For what range of stock prices would the butterfly spread lead to a loss?
64. Draw graphs showing the variation of an investor's profit and loss with terminal stock price for a portfolio consisting of:
    (a) One share and a short position in one call option.
    (b) One share and a short position in two call options.
    (c) One share and a short position in four call options.
    (d) Two shares and a short position in one call option.

    In each case, assume that the call option has an exercise price equal to the current stock price.
65. 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.
66. 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. What is the pattern of profits from the strangle?