63 = 75 27 = 57 20 = 51 16 = 45 9 = 41 4 = 35
58 = 73 25 = 55 18 = 49 13 = 43 7 = 39 3 = 33
54 = 71 23 = 53 17 = 47 5 = 37 2 = 71
44 = 69
39 = 67
36 = 65
35 = 63
32 = 61
29 = 59

**Quiz A for 2:30 Class: 10/24/12** Name Key

Assume you have purchased a put on Yahoo with a strike price of $15. This put expires on December 21, 2012. Note: Answer each of the following on a per share basis and be sure to label your axes on your graph.

a. What is the payoff on your put on 12/21 if Yahoo's stock price ends up at $10 per share and $20 per share?
b. What portfolio of stocks, calls, and bonds will generate the same set of payoffs as the put in part a? Be specific.
c. On a single graph, sketch the potential payoffs on 12/21 for your portfolio and for each of the securities in your portfolio. Be sure to clearly label each part. On your graph show the specific payoffs for your portfolio and for each of the securities in your portfolio (dots or X's will do) if Yahoo's stock price ends up at $10 per share and $20 per share. Be sure to show all relevant numbers on both axes.
d. Assume that prior to the expiration of your options, the stock price of Yahoo falls. How will this affect the beta of your put and each security in the portfolio you built in part b?

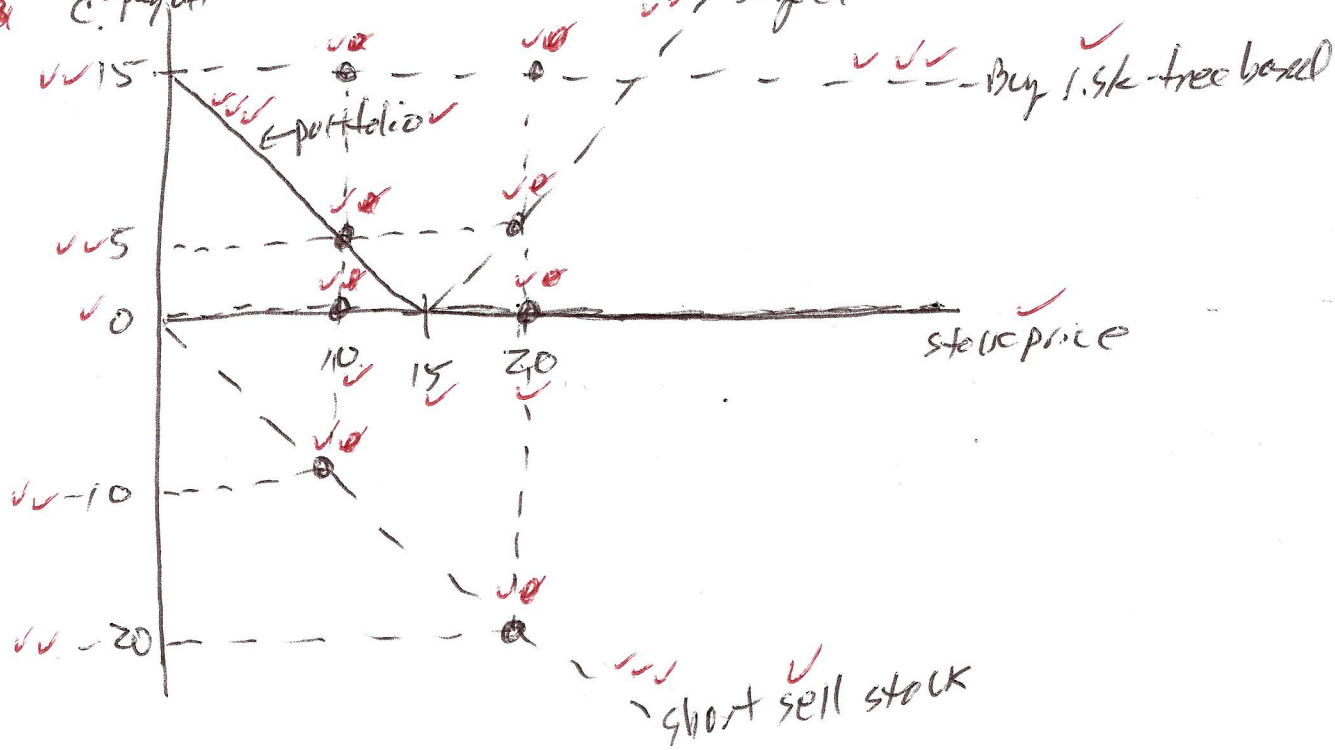
**Wall Street Journal Questions are on the back of this page.**

stk = (strike) ⇒ PP = (strike) − S

4 (73) a. 10 = 5; 20 = 0

19 b. short sell Yahoo stock, buy a call on Yahoo with a (strike price = $15) that (expires on 12/21), buy a (risk-free) bond that (matures for $15) on (12/21)

38 c. payoff




12 d. $\beta_{portfolio}$, $\beta_{stock}$ unchanged, $\beta_{call}$ rises, $\beta_{risk\text{-}free\ bond}$ unchanged
$\beta_{portfolio}$ becomes less negative