

**Quiz B for 2:30 Class: 11/07/12**

Name \_\_\_\_\_

Recount Inc. has a current price of \$40 per share. For each of the next two years, Recount's stock price will either rise \$12 per share or fall \$8 per share. Thus, Recount's stock price will equal either \$52 or \$32 per share one year from today, and Recount's stock price will equal either \$64 or \$44 or \$24 per share two years from today. Assume that the risk-free interest rate equals 6% and that replicating portfolios for a particular put on Recount would need to consist of the following:

Today:  $\Delta = -0.6328$ ,  $B = +33.4155$

One year from today:

If Recount's stock price climbs to \$52:  $\Delta = -0.30$ ,  $B = +18.1132$

If Recount's stock price falls to \$32:  $\Delta = -1.0$ ,  $B = +47.1698$

- a. What transactions would be required today and one year from today to build the replicating portfolios?
- b. Assume Recount's stock price climbs to \$52 next year. Calculate the possible payoffs two years from today on the portfolio you built one year from today ( $\Delta = -0.30$ ,  $B = +18.1132$ )?
- c. Assume Recount's stock price falls to \$32 next year. Calculate the possible payoffs two years from today on the portfolio you build one year from today ( $\Delta = -1.0$ ,  $B = +47.1698$ ) ?

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