Quiz A for 1:00 Class: 04/15/13   Name _____

Assume the risk-free rate equals 3%. Assume also that Sell Computer's current stock price is $50 per share and that its stock price will either rise by $7 or fall by $5 each of the next two years. Thus, Sell's stock price will equal either $57 or $45 one year from today and either $64, or $52, or $40 two years from today. Assume that the replicating portfolios for a certain option that matures two years from today would need to consist of the following: Today: $\Delta = -0.59284$, $B = 34.05422$; if Sell's stock price rises to $57 next year: $\Delta = -0.25$, $B = 15.53398$; if Sell's stock price falls to $45 next year: $\Delta = -1$, $B = 53.39806$. Note: use "+" for inflow, "–" for outflow in your answers.

a. What transactions would be required today to set up your replicating portfolio? What will the cash flows from these transactions equal?
b. Assume that Sell's stock price falls to $45 next year. What transactions would be required next year to rebalance the replicating portfolio? What will the cash flow from each transaction equal?
c. Assume that Sell's stock price ends up at $64 two years from today. What transactions will liquidate the replicating portfolio in two years? What will the cash flows from these transactions equal?
d. Is the option a put or a call?

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