

Quiz A for 9:45 Class: 08/01/13

Name _____

Notes: In solving the following I recommend setting up a table. Answer everything on a per-share basis. Use a “+” for an inflow and a “-” for an outflow. I will assume an inflow if no sign is given.

Assume Facebook’s stock trades at \$36.80 per share and that the price of a call that expires on 9/21/13 (51 days from today) with a \$40 strike price is \$1.24 and that the price of a put that expires on 9/21/13 (51 days from today) with a strike price of \$40 is \$4.00. Assume also that the risk-free interest rate is 0.8%.

- a. What set of transactions today will earn you an arbitrage profit today? What is your profit?
- b. What cash flows will your individual transactions today create one year from today if Facebook’s stock ends up at \$36 on 9/21 and if Facebook’s stock ends up at \$43 on 9/21? What are the total cash flows for your arbitrage portfolio on 9/21 if Facebook’s stock ends up at \$36 and if it ends up at \$43?
- c. What transactions or actions on 9/21 generate each of the individual cash flows in part (b) if Facebook’s stock price ends up at \$43? Note: Be sure to specify where each transaction occurs.