

10.01 Call Option Practice

Name _____

1. On December 10th of 2014, Larry purchased 100 one-year call options for Apple common stock at a premium of \$2 per contract. The strike price of the options is \$65 per share.

a) What is the significance of the “strike price” for Larry?

b) By December 5th 2015, the market price of Apple common stock was \$92/share. Determine Larry’s total profit if he exercises these options on December 9th, 2014 and sells the shares he gets at the market price on the same day.

2. On April 10th, Luis owns call options on AT&T stock. The strike price on each option is \$40 per share. The market price for AT&T on that date is \$52 per share.

a) Describe what this situation entitles Luis to do.

b) Determine the value of each option.

c) The next day, the market price for AT&T was \$51 per share. Determine the value of each option.

d) Luis exercises the options on the third day when the market price of AT&T is \$50.50 per share. Determine Luis’ profit on his AT&T position if the premium paid per option was \$2.

3. For a purchase of call options, does the premium count as a broker fee? Why or why not?

4. On June 30th 2015, the University of Virginia endowment purchased 50,000 nine-month call options for MSFT common stock at a premium of \$1 per option. The strike price of the options is \$52 per share.

- a) What is the latest date at which the University can exercise this option?
- b) Assume that by February 20th of 2016, the stock is trading at \$73/share. The University decides to exercise on that date. Determine the University's total profit on the sale.
- c) Ignore the work in (b) above. Assume that by March 20th of 2014, the stock is trading at \$80/share. The University decides to exercise on that date. Determine the University's total profit on the sale.

5. On January 1st 2014, Wilma bought 7000 one-year call options for INTL common stock at a premium of \$2 per option. The strike price of the options is \$45 per share. You will ignore broker fees for all of these prompts.

- a) On June 30th 2014, the stock is trading at \$55/share. Wilma exercises her options and then sells the shares that day.
- b) Ignore the work in (a). On July 31th 2014, the stock is trading at \$65/share. Wilma exercises her options and then sells the shares.
- c) Ignore the work in (a) & (b). On August 30th 2014, the stock is trading at \$75/share and Wilma exercises her options and sells the shares.

d) For every \$10 increase in the market value, how much additional profit does Wilma earn?

e) How does your answer to (d) support the concept of a 'derivative'?