Quiz B for 11:30 Class: 08/09/13 Name ____________________________

Your firm is considering investing $30 million in a new facility to produce Wi-Fi phones. There is a 30% chance that the facility would produce net, after-tax cash flows of $4 million per year for 15 years beginning one year from today and a 70% chance that the facility would produce net, after-tax cash flows of $8 million per year for 20 years beginning one year from today. If sales are low, the facility could be sold one year from today for $15 million. If sales are high, the facility can be expanded at a cost of $20 million one year from today. This expansion would produce net, after-tax cash flows of $6 million per year for 12 years beginning one year from today. The cost of capital for the project and any expansions is 11% per year.

a. Sketch a decision tree for deciding whether to build the facility.
b. Set up the calculations needed to determine whether the facility should be expanded in one year. How would you use this calculation to make a decision? You do not need to solve anything.
c. Set up the calculations needed to determine whether the facility should be sold in one year. How would you use this calculation to make a decision? You do not need to solve anything.