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.

6. \[ NPV = -10 + \frac{3}{.09} \left(1 - \left(\frac{1}{.09}\right)^{10}\right) \]
   \[ \Rightarrow \text{Expand if } NPV > 0 \]

c. \[ PV(\text{Continue}) = \frac{2}{.09} \left(1 - \left(\frac{1}{.09}\right)^{9}\right) \]
   \[ \Rightarrow \text{Sell if } PV(\text{Continue}) < 7 \]