Quiz #3

1. (6) Explain the following terms briefly:
   1. Sunk cost
   2. Cannibalization
2. (10) ABC co is considering investing in a new cane manufacturing machine that has an estimated life of three years. The cost of the machine is $30,000 and the machine will be depreciated straight-line over its three-year life to a residual value of $0. The cane manufacturing machine will result in 2000 canes in year 1. Sales are estimated to grow by 10% per year through year three. The price per cane that ABC will charge its customers is $18 each and is to remain constant. The canes have a manufacturing cost of $9 each. The firm is in the 21% tax bracket, and has a cost of capital of 10%
   1. Calculate the gross profit and the incremental unlevered net income in the three years for the this project.
   2. What is the depreciation tax shield for the project in the first year?
3. (9) BTS Corporation will pay an annual dividend of $1.35 one year from now. Analysts expect this dividend to grow at 20% per year each year until five years from now. After year 5, the growth will level off to 3% per year. According to the dividend discount model, what is the value of a share of BTS stock if the firm’s required return is 8%?