FIN500 - Critical Thinking - Module 5

1. *(Expected rate of return and risk)* Summerville Inc. is considering an investment in one of two common stocks. Given the information that follows, which investment is better, based on the risk (as measured by the standard deviation) and return of each?

COMMON STOCK A		COMMON STOCK B	
PROBABILITY	RETURN	PROBABILITY	RETURN
0.30	11%	0.20	−5%
0.40	15%	0.30	6%
0.30	19%	0.30	14%
		0.20	22%

2. *(Capital asset pricing model)* The expected return for the general market is 12.8 percent, and the risk premium in the market is 9.3 percent. Tasaco, LBM, and Exxos have betas of 0.864, 0.693, and 0.575, respectively. What are the corresponding required rates of return for the three securities?

3. *(Break-even analysis)* You have developed the following income statement for the Hugo Boss Corporation. It represents the most recent year's operations, which ended yesterday.

Sales	$ 50,439,375
Variable costs	(25,137,000)
Revenue before fixed costs	$ 25,302,375
Fixed costs	(10,143,000)
EBIT	$ 15,159,375
Interest expense	(1,488,375)
Earnings before taxes	$ 13,671,000
Taxes at 50%	(6,835,500)
Net income	$ 6,835,500

Your supervisor in the controller's office has just handed you a memorandum asking for written responses to the following questions:

a. What is the firm's break-even point in sales dollars?
b. If sales should increase by 30 percent, by what percent would earnings before taxes (and net income) increase?