Finance 360: Principles of Financial Management (Joseph Farizo) Version: 100
Problem Set 6

Name: Key: Version 100 Due: 0

Write your answers in the boxes below each question. On separate paper, neatly show your work for each question. No credit will be awarded if you provide an answer but show no work. When completed, use the Adobe Scan app to take a picture and save as a single PDF file with this as the first page. Save the file as V# where the # is your version number from the top right of this page. Example: "V101.pdf" if you have Version 101. Upload to josephfarizo.com/assignments.html. Correct answers are important, only minimal partial credit is awarded.

Question 1 Lake Clark Inc. doesn't pay dividends. (a) Calculate the stock's implied price given it has a net income of $40 million, 5 million shares outstanding, and the average PE ratio in its industry is 25. If the stock is trading at $197.30 per share, does your implied price suggest you should (b) BUY or SELL the stock?

$200, buy

Question 2 What is the instrinsic value of a share of White Sands Inc. if they have just paid a $2 dividend, you expect these dividends to grow indefinitely at 3%, the risk free rate is 3%, the expected return of the market is 11%, and the stock's beta is 1.3?

$19.81

Question 3 The expected return of the market is 6%. Risk-free 90-day T-bills yield 4%. The required rate of return on Wrangell–St. Elias Inc. is 6.80%. By the CAPM, (a) calculate the stock's beta. Then use this beta to (b) predict how much this stock would fall if the market were to fall 13.00%?

Beta = 1.4, -18.20%

Question 4 There's a 42% chance of a recession and 58% chance of an expansion. Stocks A, B, and C return -7%, -3%, and -7%, respectively, in recessions, and 11%, 13%, and 7%, respectively, in expansions. What's the standard deviation of the portfolio with 3/4 of your money in A, and the rest split equally between B and C?

8.5139%

Question 5 Determine a firm's WACC given the following: stock price = \$29, 3 million shares outstanding, par value of debt =\$38 million, with a price of 98% of par. Coupons = 9%, and 11 years to maturity (semiannual coupon payments). T-bills yield 3%, beta = 1.1, expected return on the market = 10%, and a tax rate of 21%.

9.675%

Question 6 A stock has expected year-end dividends over the next 4 years of \$2, \$3, \$5, and \$7. After the last dividend (year 4), you expect dividends to grow indefinitely at 1%. What is the intrinsic value of a share? T-bills yield 2%, the expected return of the market is 11%, and the stock's beta is 1.05.

\$56.21

Question 7 You paid \$100 for a share of Redwood Inc. stock, and held until you received a \$8 dividend, then immediately sold for \$104. What was your (a) dividend yield, (b) capital gains yield, and (c) total return in percent?

(a) = 8%, (b) = 4%, (c) = 12%

Question 8 There's a 54% chance of a recession and 46% chance of an expansion. Stocks A, B, and C return -3%, -4%, and -4%, respectively, in recessions, and 10%, 10%, and 9%, respectively, in expansions. What's the expected return of the portfolio with 3/4 of your money in A, and the rest split equally between B and C?

2.7875%

Question 9 The expected return of the market is 9%. EEE Corp's stock price generally moves 1.6% when the market moves 1%. Risk-free 90-day T-bills yield 1%. (a) What is the expected return (or the required rate of return) of this stock? (b) What would the required rate of return be if the stock had a beta of 1.83?

(a) = 13.8% (b) = 15.64%

Rate this problem set from 1 to 5, with 1 being "very easy" and 5 being "very difficult." (circle one)

1 2 3 4 5

About how many minutes did you spend on this problem set? (circle one)

<45 45 60 75 >75