

Finance 366: Investments (Joseph Farizo)
Problem Set 5

Version: 100

Name: _____ Key: Version 100

Due: _____

Student ID: _____

Print and write your answers in the boxes below each question. On separate paper, neatly show your work, done by hand, 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 <https://josephfarizo.com/assignments.html>. Correct answers are important, only minimal partial credit is awarded.

Question 1 You identify a stock trading at \$107, and you expect year-end dividends over the next 2 years to be \$1 and \$4. At the time the last of your forecasted dividends is paid, you expect the shares will be trading at \$150. (a.) What is the intrinsic value of a share? (b.) Should you purchase these shares given the intrinsic value relative to the current share price? Assume the required rate of return on these shares is 15% given their level of systematic risk.

V0=\$117.32, Undervalued - Buy
0.0000

Question 2 A firm's earnings before interest and taxes is \$154565, the depreciation expense is \$21639, the firm spent \$17002 on capital expenditures and \$7728 on interest. Last year's net working capital was \$18548, and the NWC now is \$20774. The firm's debt last year was \$6183, and it is now \$6492. The firm has a total of 10000 shares outstanding, and a tax rate of 35%. What is the firm's PER SHARE free cash flow to equity holders?

9.8164
#N/A

Question 3 You identify a stock trading at \$106, and you expect year-end dividends over the next 4 years to be \$2, \$3, \$5, and \$8. At the time of your last forecasted dividend (the end of the year 4), you expect the dividends to grow indefinitely at 6%. (a.) What is the intrinsic value of a share? (b.) Should you purchase these shares based on the intrinsic value relative to the current share price? Assume the required rate of return on these shares is 12% given their level of systematic risk.

\$102.64, Overvalued - Sell
0

Question 4 Estimate the intrinsic value of a share of stock by the FCF method. The FCF today is \$840 which you expect to grow at 9% for the next 2 years, and then indefinitely at 2%. The stock's beta is 1.1, market value of debt and equity is 108 and 270 respectively, tax rate is 21%, forecast D/E is 20%, risk free rate is 1%, cost of debt is 5%, and expected return of the market is 10%. There are 111 shares outstanding.

143.8300

0

Question 5 You expect a firm's free cash flow to equity holders over the next 3 years to be \$5603, \$9372, and \$11866. At the time of your last forecasted cash flow (the end of the year 3), you expect the FCFE to grow indefinitely at 5%. What is the intrinsic value of a share assuming there are 16895 shares outstanding? Assume the required rate of return is 10%.

12.3700

0

Question 6 What is the intrinsic value of a share of Target Corp if they have just paid a \$6 dividend, you expect these dividends to grow indefinitely at 5%, the risk free rate is 2%, the expected return of the market is 13%, and the stock's beta is 1.5?

\$46.67

0

Question 7 Braxton is interested in purchasing JWF LLC stock, trading at \$92 with that price expected to grow 1.1% over a year. A \$7 dividend is expected at the end of that year. They regress the excess returns of the stock on the excess return of the market and get a slope of 0.8. T-bills yield 2%, and the expected return of the S&P 500 is 15%. Compute (a.) the expected and (b.) required return of one share for a one year holding period. (c.) Should they buy these shares?

ER = 8.709%, RR = 12.4%, Overvalued & Sell

0

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