

Directions: Answer the following questions on a separate document. Explain how you reached the answer or show your work if a mathematical calculation is needed, or both. Submit your assignment using the assignment link in the course shell. This homework assignment is worth 100 points.

Use the following information for questions 1 through 4:

The Goodman Industries' and Landry Incorporated's stock prices and dividends, along with the Market Index, are shown below. Stock prices are reported for December 31 of each year, and dividends reflect those paid during the year. The market data are adjusted to include dividends.

Goodman Industries			Landry Incorporated		Market Index
Year	Stock Price	Dividend	Stock Price	Dividend	Includes Dividends
2013	\$25.88	\$1.73	\$73.13	\$4.50	17495.97
2012	22.13	1.59	78.45	4.35	13178.55
2011	24.75	1.50	73.13	4.13	13019.97
2010	16.13	1.43	85.88	3.75	9651.05
2009	17.06	1.35	90.00	3.38	8403.42
2008	11.44	1.28	83.63	3.00	7058.96

1. Use the data given to calculate annual returns for Goodman, Landry, and the Market Index, and then calculate average annual returns for the two stocks and the index. (Hint: Remember, returns are calculated by subtracting the beginning price from the ending price to get the capital gain or loss, adding the dividend to the capital gain or loss, and then dividing the result by the beginning price. Assume that dividends are already included in the index. Also, you cannot calculate the rate of return for 2008 because you do not have 2007 data.)
2. Calculate the standard deviations of the returns for Goodman, Landry, and the Market Index. (Hint: Use the sample standard deviation formula given in the chapter, which corresponds to the STDEV function in Excel.)
3. What dividends do you expect for Goodman Industries stock over the next 3 years if you expect the dividend to grow at the rate of 5% per year for the next 3 years? In other words, calculate D1, D2, and D3. Note that D0 = \$1.50.
4. Assume that Goodman Industries' stock has a required return of 13%. You will use this required return rate to discount the dividends calculated earlier. If you plan to buy the stock, hold it for 3 years, and then sell it for \$27.05, what is the most you should pay for it?