

MAT116 Ch 12 Quiz: Last Name: _____ First _____

Formulas: Variance = $\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n-1}$; Standard deviation = $\sqrt{\frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n-1}}$

a) Consider the following set of data: 12, 21, 14, 18, 10

Compute the following:

a. The mean of the data.

b. The standard deviation of the data.

b) After downloading several years of stock data for Disney, it is found that the weekly ratios have the following properties.

Max = 1.223; Min = 0.7765; Mean = 1.0034; Standard Deviation = 0.223

Compute the annualized volatility for this stock.

- c) Suppose a stock grows by the risk-free rate of 6%. If the average weekly ratio for this stock is found to be 1.005, by what adjusting value do you need to adjust each weekly ratio in order to normalize them? Also, indicate if you would need to add or subtract this adjusting value in order to normalize your ratios.