

Key to 4:00 Quiz: 2/15/12

correctly typed key

Quiz: Assume that the past four years are representative for both Google and Ford. Set up the calculations (equations and all relevant numbers) to determine on which of the two stocks you could expect to earn the highest return and on which of the stocks you could expect the most volatile returns.

Return on:

Year	Google	Ford
2011	-3%	-22%
2010	13%	36%
2009	57%	100%
2008	-28%	-72%

Note: You don't have to solve anything, just set everything up.

x13
x10

$$\bar{r}_G = \frac{1}{4}(-3 + 13 + 57 - 28)$$

$$\bar{r}_F = \frac{1}{4}(-22 + 36 + 100 - 72)$$

=> can expect highest return on stock with highest \bar{r}

x13

$$SD(R_G) = \sqrt{\left(\frac{1}{3}((-3 - \bar{r}_G)^2 + (13 - \bar{r}_G)^2 + (57 - \bar{r}_G)^2 + (-28 - \bar{r}_G)^2)\right)}$$

$$SD(R_F) = \sqrt{\left(\frac{1}{3}((-22 - \bar{r}_F)^2 + (36 - \bar{r}_F)^2 + (100 - \bar{r}_F)^2 + (-72 - \bar{r}_F)^2)\right)}$$

=> can expect most volatile returns on stock with highest SD