

27) Consider a two-year project, where the cost of capital is 10%.

There are only three cash flows for this project.

- The first occurs at $t = 0$, and is -100 .
- The second occurs at $t = 1$, and is 66 .
- The third occurs at $t = 2$, and is X .

Determine X , the level of the cash flow at $t = 2$, that leads to the project breaking even.

- (A) 34.0
- (B) 38.4
- (C) 44.0
- (D) 48.4
- (E) 54.0

- 4) You are given the following information about a portfolio consisting of stocks X, Y, and Z:

Stock	Investment	Expected Return
X	10,000	8%
Y	15,000	12%
Z	25,000	16%

Calculate the expected return of the portfolio.

- (A) 10.8%
- (B) 11.4%
- (C) 12.0%
- (D) 12.6%
- (E) 13.2%

- 3) You are given the following information about the annual returns of two stocks, X and Y :
- i) The expected returns of X and Y are $E[R_X] = 10\%$ and $E[R_Y] = 15\%$.
 - ii) The volatilities of the returns are $V_X = 18\%$ and $V_Y = 20\%$.
 - iii) The correlation coefficient of the returns for these two stocks is 0.25.
 - iv) The expected return for a certain portfolio, consisting only of stocks X and Y , is 12%.

Calculate the volatility of the portfolio return.

- (A) 10.88%
- (B) 12.56%
- (C) 13.55%
- (D) 14.96%
- (E) 16.91%

- 2) You are given the following information about a portfolio with four assets.

Asset	Market Value of Asset	Covariance of asset's return with the portfolio return
I	40,000	0.15
II	20,000	-0.10
III	10,000	0.20
IV	30,000	-0.05

Calculate the standard deviation of the portfolio return.

- (A) 4.50%
- (B) 13.2%
- (C) 20.0%
- (D) 21.2%
- (E) 44.7%