

Module 2

1. The tangency portfolio is defined as the portfolio of risky assets that has the ...
 - A) Smallest variance
 - B) Highest expected return
 - C) Highest Sharpe Ratio

2. The Capital Asset Pricing Model (CAPM) has the prediction that stock returns should be related to the ...
 - A) Standard deviation of a firm's stock returns
 - B) Idiosyncratic or firm-specific risk of a firm's stock
 - C) Systematic or market risk of a firm's stock

3. Suppose a stock is estimated to have a beta (β) of 0.5. This stock has the same risk as a portfolio that is ...
 - A) 100% invested in the risk-free asset
 - B) 50% invested in the risk-free asset and 50% invested in the overall stock market
 - C) 100% invested in the overall stock market
 - D) 150% invested in the overall stock market and -50% in the risk-free asset (i.e., borrowing to invest even more in the stock market)

4. Randomly adding more stocks to a portfolio will eventually reduce the variability of the portfolio performance to near zero as long as the returns of the stocks are ...
 - A) Independent of each other (i.e., have zero correlation)
 - B) Positively related to each other (i.e., have positive correlation)

5. Historically, a portfolio consisting of small-value stocks has yielded a positive alpha (α) in a CAPM regression.
 - A) True
 - B) False

6. In the CAPM, an asset with a small beta (β) will also have a low R-squared in the CAPM regression.
 - A) True
 - B) False

7. The beta (β) of the risk-free asset in the CAPM is ...
 - A) 0
 - B) 0.5
 - C) 1

8. Suppose a mutual fund yielded a return of 14% last year. Its CAPM beta (β) is 1.2. The risk-free rate was 5% last year and the stock market return was 10% last year. What is the required return (i.e., benchmark return) for the mutual fund in the CAPM?

- A) 5
- B) 6
- C) 7
- D) 8
- E) 9
- F) 10
- G) 11
- H) 12
- I) 13
- J) 14

9. Suppose a mutual fund yielded a return of 14% last year. Its CAPM beta (β) is 1.2. The risk-free rate was 5% last year and the stock market return was 10% last year. What is the alpha (α) of the mutual fund?

- A) -5
- B) -4
- C) -3
- D) -2
- E) -2
- F) -1
- G) 0
- H) 1
- I) 2
- J) 3
- K) 4
- L) 5

10. Suppose a mutual fund yielded a return of 14% last year. The risk-free rate was 5% last year and the stock market return was 10% last year. Its CAPM alpha (α) is 0. What is beta (β) for the mutual fund in the CAPM?

- A) 0.2
- B) 0.4
- C) 0.6
- D) 0.8
- E) 1
- F) 1.2
- G) 1.4
- H) 1.6
- I) 1.8
- J) 2.0

11. Suppose a stock is estimated to have a beta (β) of 1.5. This stock has the same risk as a portfolio that is ...

- A) 100% invested in the risk-free asset

- B) 50% invested in the risk-free asset and 50% invested in the overall stock market
- C) 100% invested in the overall stock market
- D) 150% invested in the overall stock market and -50% in the risk-free asset (i.e., borrowing to invest even more in the stock market)

12. Other than beta (β), what else should be able to predict stock returns in a CAPM setting?

- A) Volatility of returns
- B) Whether the firm has value or growth characteristics
- C) Firm age
- D) Firm size (measured by the market capitalization of equity)
- E) All these should predict returns in a CAPM world
- F) Nothing else should predict returns in a CAPM world