

1. Suppose you pay \$9,700 for a Treasury bill maturing in six months. What is the effective annual rate of return for this investment?

- A) 3.1%
- B) 6%
- C) 6.18%
- D) 6.28%
- E) 5.91%

2. The arbitrage pricing theory (APT) differs from the capital asset pricing model (CAPM) because the APT:

- A) places more emphasis on market risk
- B) minimizes the importance of diversification
- C) recognizes multiple unsystematic risk factors
- D) recognizes multiple systematic risk factors
- E) uses risk premiums based on micro variables

3. Recent research by Fama and French calls into questions the CAPM because they find

- A) average security returns are negatively related to the firm P/E and M/B ratios.
- B) P/E and M/B are only two of several factors explaining average returns.
- C) a weak relationship between average returns and beta for 1941 to 1990 and no relationship from 1963 to 1990.
- D) Both A and C.
- E) Both B and C.

4. Stock A has an expected return of 20%, and stock B has an expected return of 4%. However, the risk of stock A as measured by its variance is 3 times that of stock B. If the two stocks are combined in a portfolio with 40% of the portfolio invested in stock A, what would be the portfolio's expected return?

- A) 4%
- B) 8%
- C) 10.4%
- D) Greater than 20%
- E) Need to know the stocks' correlation to answer the problem

5. You are in charge of buying a new squash ball thrower for the club and have narrowed your choices to 2 machines, one made by Dunlop and the other by Head. The Dunlop costs \$500 today, will require annual maintenance payments of \$120, and will last for 3 years. The Head costs \$600, has annual maintenance payments of \$100, but will last 4 years. If the appropriate discount rate is 10% and all maintenance payments are made at year end, which is the cheaper machine?

- A) The Dunlop because the NPV of its costs is higher than the NPV of the

Head's costs

B) The Head because the NPV of its costs is higher than the NPV of the Dunlop's costs

C) We can't tell because the Head lasts for 4 years but the Dunlop lasts for only 3

D) The Dunlop because its annual cost is greater than the Head's

E) The Head because its annual cost is less than the Dunlop's.

6. When many assets are included in a portfolio or index the risk of the portfolio or index will be:

A) greater than the risk of the securities because the correlations are greater than 1.

B) equal to the risk of the securities because the correlations are equal to 1.

C) less than the risk of the securities because the correlations are usually less than 1.

D) unaffected by the risk of securities because their correlations are less than 1.

E) less than the risk of the securities if the correlations are greater than 1.

7. Exxon just announced yesterday that its 4th quarter earnings will be 10% higher than last year's 4th quarter. You observe that Exxon had an abnormal -1.2% return yesterday. This suggests:

A) the market is not efficient

B) Exxon's stock will probably rise tomorrow

C) investors expected the earnings increase to be smaller than what actually announced

D) investors expected the earnings increase to be larger than what was actually announced

E) earnings are expected to decrease next quarter

8. How is the cost of a machine treated differently by a financial analyst doing an NPV analysis and an accountant preparing financial statements?

Answer: Finance: Cost of machine is negative CF when purchased. Accounting (Tax): Cost of machine is spread out over useful life (Accounting: Straight-line; Tax: Accelerated).

9. Which of the following statements is **true**?

A) Assets with lower levels of market risk will sell for higher prices.

B) Assets with lower levels of market risk will have higher expected rates of return.

- C) Assets with higher levels of market risk will sell for higher prices.
- D) Assets with higher levels of market risk will have lower expected rates of return.