Question #1 of 15

Question ID: 1572776

There is a 60% chance that the economy will be good next year and a 40% chance that it will be bad. If the economy is good, there is a 70% chance that XYZ Incorporated will have EPS of $5.00 and a 30% chance that their earnings will be $3.50. If the economy is bad, there is an 80% chance that XYZ Incorporated will have EPS of $1.50 and a 20% chance that their earnings will be $1.00. What is the firm's expected EPS?

A) $3.29.

B) $5.95.

C) $2.75.

Question #2 of 15

Question ID: 1572780

An analyst announces that an increase in the discount rate next quarter will double her earnings forecast for a firm. This is an example of a:

A) use of Bayes' formula.

B) joint probability.

C) conditional expectation.

Question #3 of 15

Question ID: 1572782

An economist estimates a 60% probability that the economy will expand next year. The technology sector has a 70% probability of outperforming the market if the economy expands and a 10% probability of outperforming the market if the economy does not expand. Given the new information that the technology sector will not outperform the market, the probability that the economy will not expand is *closest* to:

A) 54%.

B) 33%.

C) 67%.

Question #4 of 15

Question ID: 1572783

The probability of A is 0.4. The probability of A^C is 0.6. The probability of (B | A) is 0.5, and the probability of (B | A^C) is 0.2. Using Bayes' formula, what is the probability of (A | B)?

A) 0.375.

B) 0.625.

C) 0.125.

Question #5 of 15

Question ID: 1572774

An investor is considering purchasing ACQ. There is a 30% probability that ACQ will be acquired in the next two months. If ACQ is acquired, there is a 40% probability of earning a 30% return on the investment and a 60% probability of earning 25%. If ACQ is not acquired, the expected return is 12%. What is the expected return on this investment?

A) 18.3%.

B) 16.5%.

C) 12.3%.

Question #6 of 15

Question ID: 1572777

A two-sided but very thick coin is expected to land on its edge twice out of every 100 flips. And the probability of face up (heads) and the probability of face down (tails) are equal. When the coin is flipped, the prize is $1 for heads, $2 for tails, and $50 when the coin lands on its edge. What is the expected value of the prize on a single coin toss?

A) $2.47.

B) $1.50.

C) $17.67.

Question #7 of 15

Question ID: 1572787

A parking lot has 100 red and blue cars in it.

- 40% of the cars are red.
- 70% of the red cars have radios.
- 80% of the blue cars have radios.

What is the probability that the car is red given that it has a radio?

A) 37%.

B) 28%.

C) 47%.

Question #8 of 15

Question ID: 1572786

An analyst expects that 20% of all publicly traded companies will experience a decline in earnings next year. The analyst has developed a ratio to help forecast this decline. If the company has a decline in earnings, there is a 90% probability that this ratio will be negative. If the company does not have a decline in earnings, there is only a 10% probability that the ratio will be negative. The analyst randomly selects a company with a negative ratio. Based on Bayes' theorem, the updated probability that the company will experience a decline is:

A) 18%.

B) 26%.

C) 69%.

Question #9 of 15

Question ID: 1572784

Bonds rated B have a 25% chance of default in five years. Bonds rated CCC have a 40% chance of default in five years. A portfolio consists of 30% B and 70% CCC-rated bonds. If a randomly selected bond defaults in a five-year period, what is the probability that it was a B-rated bond?

A) 0.211.

B) 0.250.

C) 0.625.

Question #10 of 15

Question ID: 1572775

There is a 40% probability that an investment will earn 10%, a 40% probability that the investment will earn 12.5%, and a 20% probability that the investment will earn 30%. What are the mean expected return and the standard deviation of expected returns, respectively?

A) 17.5%; 5.75%.

B) 15.0%; 5.75%.

C) 15.0%; 7.58%.

Question #11 of 15

Question ID: 1572773

Tully Advisers, Inc., has determined four possible economic scenarios and has projected the portfolio returns for two portfolios for their client under each scenario. Tully's economist has estimated the probability of each scenario as shown in the table below. Given this information, what is the expected return on Portfolio A?

Scenario	Probability	Return on Portfolio A	Return on Portfolio B
A	15%	17%	19%
B	20%	14%	18%
C	25%	12%	10%
D	40%	8%	9%

A) 12.55%.

B) 12.75%.

C) 11.55%.

Question #12 of 15

Question ID: 1572781

Tina O'Fahey, CFA, believes a stock's price in the next quarter depends on two factors: the direction of the overall market and whether the company's next earnings report is good or poor. The possible outcomes and some probabilities are illustrated in the tree diagram shown below:

Based on this tree diagram, the expected value of the stock if the market decreases is *closest* to:

A) $26.00.

B) $62.50.

C) $57.00.

Question #13 of 15

Question ID: 1572785

John purchased 60% of the stocks in a portfolio, while Andrew purchased the other 40%. Half of John's stock-picks are considered good, while a fourth of Andrew's are considered to be good. If a randomly chosen stock is a good one, what is the probability John selected it?

A) 0.40.

B) 0.30.

C) 0.75.

Question #14 of 15

Question ID: 1572779

A conditional expectation involves:

A) determining the expected joint probability.

B) calculating the conditional variance.

C) refining a forecast because of the occurrence of some other event.

Question #15 of 15

Question ID: 1572778

Use the following data to calculate the standard deviation of the return:

- 50% chance of a 12% return
- 30% chance of a 10% return
- 20% chance of a 15% return

A) 1.7%.

B) 2.5%.

C) 3.0%.