Question #1 of 35

Question ID: 1427672

The minimum amount of money an investor could expect to lose with a given probability (i.e., level of significance) over a specific period of time is known as:

A) the hedge ratio.

B) value at risk (VaR).

C) delta.

D) the coefficient of variation.

Question #2 of 35

Question ID: 1256904

Portfolio A has total assets of $14 million and an expected return of 12.50 percent. Historical VaR of the portfolio at 5 percent probability level is $2,400,000. What is the portfolio's standard deviation?

A) 14.65%.

B) 15.75%.

C) 12.50%.

D) 17.97%.

Question #3 of 35

Question ID: 1256886

A global portfolio is comprised of European and Emerging market equities. The correlation of returns for the two sectors is 0.3. Based on the information below, what is the portfolio's annual value at risk (VaR) at a 5 percent probability level?

Stock	Value	E(R)	σ
European	$800,000	9.0%	15.0%
Emerging	$200,000	18.0%	25.0%

A) $128,280.

B) $230,491.

C) $110,700.

D) $130,300.

Question #4 of 35

Question ID: 1256905

Which of the following statements about value at risk (VaR) is true?

A) VaR increases with lower significance levels.

B) VaR decreases with longer holding periods.

C) VaR is independent of probability level.

D) VaR is not dependent on the choice of holding period.

Question #5 of 35

Question ID: 1256913

The price value of a basis point (PVBP) of a bond portfolio is $45,000. Expected changes in interest rates over the next year are summarized below:

Change in Interest rates	Probability
> +1.50%	1%
+1.00−1.49%	29%
0.00−0.99%	20%
−0.99-0.00%	45%
< −1.00%	5%

What is the value at risk (VaR) for the bond portfolio at a 99 percent confidence level?

A) $7,850,500.

B) $6,750,000.

C) $2,250,000.

D) $4,500,000.

Question #6 of 35

Question ID: 1256914

A portfolio comprises 2 stocks: A and B. The correlation of returns of stocks A and B is 0.8. Based on the information below, compute the portfolio's annual VaR at a 5 percent probability level.

Stock	Value	E(R)	σ
A	$75,000	12.0%	15.0%
B	$25,000	10.8%	10.0%

A) $11,700.

B) $23,491.

C) $10,295.

D) $13,300.

Question #7 of 35

Question ID: 1256901

If the one-day value at risk (VaR) of a portfolio is $50,000 at a 95% probability level, this means that we should expect that in one day out of:

A) 95 days, the portfolio will lose $50,000.

B) 95 days, the portfolio will increase by $50,000 or more.

C) 20 days, the portfolio will decline by $50,000 or less.

D) 20 days, the portfolio will decline by $50,000 or more.

Question #8 of 35

Question ID: 1256900

Value at risk (VaR) is a benchmark associated with a given probability. The actual loss:

A) will have an inverse relationship with VaR.

B) is expected to be the average of the expected return of the portfolio and VaR.

C) cannot exceed this amount.

D) may be much greater.

Question #9 of 35

Question ID: 1256899

In the presence of fat tails in the distribution of returns for a linear portfolio, VaR based on the delta-normal method would:

A) cannot be determined from the information provided.

B) be the same as the true VaR.

C) overestimate the true VaR.

D) underestimate the true VaR.

Question #10 of 35

Question ID: 1256916

Conditional VaR (i.e., expected shortfall) is best described as the:

A) average loss given that losses exceed the VaR.

B) loss if new assets are added to the portfolio.

C) loss conditional on specific economic conditions.

D) loss conditional on specific market conditions.

Question #11 of 35

Question ID: 1256902

A hedge fund portfolio has an expected return of 0.1 percent per day and a 5 percent probability 1-day value at risk (VaR) of $909. Which of the following statement is the best descriptor of this information?

A) The portfolio will earn more than $909 only 5% of the time.

B) The maximum daily loss on the portfolio is $909.

C) The minimum daily loss on the portfolio is $909.

D) The minimum loss for the worst 5% of the days is $909.

Question #12 of 35

Question ID: 1256907

Which of the following statements about value at risk (VaR) is true?

A) VaR increases with longer holding periods.

B) VaR is not dependent on the choice of holding period.

C) VaR is independent of probability level.

D) VaR decreases with lower probability levels.

Question #13 of 35

Question ID: 1256917

Which of the following statements regarding value at risk (VaR) and expected shortfall (ES) is least accurate?

A) As the number of VaR observations increases, the ES will increase.

B) The calculation of lognormal VaR and normal VaR will be similar when dealing with long-time periods.

C) The ES provides an estimate of the tail loss by averaging the VaRs for increasing confidence levels in the tail.

D) The calculated VaR amount is typically reported as a positive value.

Question #14 of 35

Question ID: 1256912

Which of the following statements about value at risk (VaR) is true?

A) VaR is not dependent on the choice of holding period.

B) VaR decreases with lower confidence level.

C) VaR is independent of probability level.

D) VaR decreases with longer holding periods.

Question #15 of 35

Question ID: 1256894

On December 31, 2006, Portfolio A had a market value of $2,520,000. The historical standard deviation of daily returns was 1.7%. Assuming that Portfolio A is normally distributed, calculate the daily VaR(2.5%) on a dollar basis and state its interpretation. Daily VaR(2.5%) is equal to:

A) $83,966, implying that daily portfolio losses will only exceed this amount 2.5% of the time.

B) $70,686, implying that daily portfolio losses will fall short of this amount 2.5% of the time.

C) $70,686, implying that daily portfolio losses will only exceed this amount 2.5% of the time.

D) $83,966, implying that daily portfolio losses will fall short of this amount 2.5% of the time.

Question #16 of 35

Question ID: 1256911

For a $1,000,000 stock portfolio with an expected return of 12 percent and an annual standard deviation of 15 percent, what is the VaR with 95 percent confidence level?

A) $127,500.

B) $150,000.

C) $247,500.

D) $120,000.

Question #17 of 35

Question ID: 1256893

Hugo Nelson is preparing a presentation on the attributes of value at risk. Which of Nelson's following statements is not correct?

A) VaR was developed in order to more closely represent the economic capital necessary to ensure commercial bank solvency.

B) VaR can account for the diversified holdings of a financial institution, reducing capital requirements.

C) VaR(10%) = $0 indicates a positive dollar return is likely to occur on 90 out of 100 days.

D) VaR(1%) can be interpreted as the number of days that a loss in portfolio value will exceed 1%.

Question #18 of 35

Question ID: 1256890

A portfolio comprises 2 stocks: A and B. The correlation of returns of stocks A and B is 0.4. Based on the information below, what is the portfolio's value-at-risk (VaR) at a 5 percent probability level?

Stock	Value	E(R)	σ
A	$85,000	15.0%	18.0%
B	$15,000	12.0%	10.0%

A) $13,300.

B) $1,410.

C) $11,784.

D) $23,491.

Question #19 of 35

Question ID: 1256898

The accuracy of a value at risk (VaR) measure:

A) can only be ascertained after the fact.

B) is complete because the process is deterministic.

C) is included in the statistic.

D) is one minus the probability level.

Question #20 of 35

Question ID: 1256891

Tim Jones is evaluating two mutual funds for an investment of $100,000. Mutual fund A has $20,000,000 in assets, an annual expected return of 14 percent, and an annual standard deviation of 19 percent. Mutual fund B has $8,000,000 in assets, an annual expected return of 12 percent, and an annual standard deviation of 16.5 percent. What is the daily value at risk (VaR) of Jones' portfolio at a 5 percent probability if he invests his money in mutual fund A?

A) $38,480.

B) $13,344.

C) $1,924.

D) $1,668.

Question #21 of 35

Question ID: 1256882

The 10-Q report of Global Bank states that the monthly VaR of ABC Bank is $10 million at a 95% confidence level. What is the proper interpretation of this statement?

A) There is a 5% probability that the bank will gain less than $10m each month.

B) There is a 95% probability that the bank will lose less than $10m over a month.

C) If we collect 100 monthly gain/loss data of Global Bank, we will always see five months with losses larger than $10m.

D) There is a 5% probability that the bank will lose less than $10m over a month.

Communities Bank has a $17 million par position in a bond with the following characteristics:

- The bond is a 7-year, zero-coupon bond.
- The market value is $12,358,674.
- The bond is trading at a yield to maturity of 4.6%.
- The historical mean change in daily yield is 0.0%.
- The daily standard deviation of the position is 1%.

Question #22 - 23 of 35

Question ID: 1256888

The one-day VaR for this bond at the 95% confidence level is closest to:

A) $339,487.

B) $105,257.

C) $260,654.

D) $203,918.

Question #23 - 23 of 35

Question ID: 1427670

The 10-day VaR on this bond is closest to:

A) $736,487.

B) $866,111.

C) $487,698.

D) $644,845.

Question #24 of 35

Question ID: 1256908

A portfolio manager is constructing a portfolio of stocks and corporate bonds. The portfolio manager has estimated that stocks and corporate bond returns have daily standard deviations of 1.8% and 1.1%, respectively, and estimates a correlation coefficient of returns of 0.43. If the portfolio manager plans to allocate 35% of the portfolio to corporate bonds and the rest to stocks, what is the daily portfolio VaR (2.5%) on a percentage basis?

A) 2.27%.

B) 2.71%.

C) 2.57%.

D) 3.05%.

Question #25 of 35

Question ID: 1256884

Super Hedge fund has $20 million in assets. The total return for the past 40 months is given below. What is the monthly value at risk (VaR) of the portfolio at a 5 percent probability level?

Monthly Returns							
−22.46%	9.26%	−4.69%	−20.66%	−2.77%	1.17%	−16.11%	−6.73%
0.57%	12.56%	−18.26%	−32.81%	24.15%	−34.26%	−5.49%	−19.76%
−34.75%	−12.02%	32.74%	−31.35%	13.68%	−31.13%	7.07%	−33.56%
−20.37%	30.27%	31.09%	−3.26%	−14.42%	4.75%	15.63%	−11.57%
7.23%	−20.77%	−19.61%	−2.42%	−30.59%	28.83%	−22.25%	−10.26%

A) $16,725,000.

B) $6,852,000.

C) $7,200,000.

D) $9,000,000.

Question #26 of 35

Question ID: 1256918

The expected loss given that the loss has exceeded the VaR is best described as the:

A) economic capital.

B) expected shortfall.

C) unexpected loss.

D) Poisson parameter.

Question #27 of 35

Question ID: 1256896

A portfolio manager determines that his portfolio has an expected return of $20,000 and a standard deviation of $45,000. Given a 95 percent confidence level, what is the portfolio's VaR?

A) $94,250.

B) $43,500.

C) $54,250.

D) $74,250.

Question #28 of 35

Question ID: 1256895

Derivation Inc. has a portfolio of $100 MM. The expected return over one year is 6 percent, with a standard deviation of 8 percent. What is the VaR for this portfolio at the 99 percent confidence level?

A) $12.1 MM.

B) $2.0 MM.

C) $12.6 MM.

D) $7.2 MM.

Question #29 of 35

Question ID: 1256883

There are several different methods commonly used to compute value at risk (VaR). Which of the following statements best describes historical VaR? It is:

A) an analysis used by regulators that compares current market risks to historical market risks.

B) an analysis that looks for trends in VaR from period to period to predict future VaR.

C) an analysis used by investors that compares current market risks to historical market risks.

D) a method that computes VaR by assuming that losses in the future will occur with the same frequency and magnitude as they have in the past.

Question #30 of 35

Question ID: 1562372

The price value of a basis point (PVBP) of a $20 million bond portfolio is $25,000. Interest rate changes over the next one year are summarized below:

Change in Interest rates	Probability
> +2.50%	1%
+2.00−2.49%	4%
0.00−1.99%	50%
−0.99−0.00%	40%
< −1.00%	5%

Compute VaR for the bond portfolio at 95 percent confidence level.

A) $12,500.

B) $5,000,000.

C) $2,500,000.

D) $2,750,000.

Question #31 of 35

Question ID: 1427671

A large bank currently has a security portfolio with a market value of $145 million. The daily returns on the bank's portfolio are normally distributed with 80% of the distribution lying within 1.28 standard deviations above and below the mean and 90% of the distribution lying within 1.65 standard deviations above and below the mean. Assuming the standard deviation of the bank's portfolio returns is 1.2%, calculate the VaR(5%) on a one-day basis.

A) cannot be determined from information given.

B) $2.23 million.

C) $2.87 million.

D) $2.04 million.

Question #32 of 35

Question ID: 1256906

The profit/loss distribution for Morozov Inc. (Morozov) is normally distributed with an annual mean of $20 million and a standard deviation of $13 million. Which of the following amounts is closest to VaR at the 99% confidence level using a parametric approach?

A) $13.54 million.

B) $5.48 million.

C) $1.45 million.

D) $10.29 million.

Question #33 of 35

Question ID: 1256885

Alto Steel's pension plan has $250 million in assets with an expected return of 12 percent. The last thirty monthly returns are given below.

What is the 10 percent monthly probability VaR for Alto's pension plan?

21.84%	−21.50%	31.76%	8.88%	2.54%	17.44%
6.97%	10.00%	2.71%	35.66%	31.07%	18.56%
9.82%	−7.94%	−0.78%	12.57%	11.77%	8.47%
2.99%	14.35%	14.20%	9.81%	11.03%	22.25%
9.68%	19.55%	8.53%	39.45%	36.15%	10.97%

A) $3,000,000.

B) $1,950,000.

C) $36,125,850.

D) $1,200,000.

Question #34 of 35

Question ID: 1482924

If the expected change in a fixed income portfolio is $520,000 and the standard deviation of the estimated change in the portfolio is $2,275,500, the 95 percent value at risk (VaR) for this portfolio is closest to:

A) $3,223,197.50.

B) $3,743,197.50.

C) $4,598,597.50.

D) $855,400.00.

Question #35 of 35

Question ID: 1256909

An insurance company currently has a security portfolio with a market value of $243 million. The daily returns on the company's portfolio are normally distributed with a standard deviation of 1.4%. Using the table below, determine which of the following statements are true.

	$Z_{critical}$	
Alpha	**One-tailed**	**Two-tailed**
10%	1.28	1.65
2%	2.06	2.32

I. One-day VaR(1%) for the portfolio on a percentage basis is equal to 3.25%.

II. One-day VaR(10%) for the portfolio on a dollar basis is equal to $5.61 million.

III. |One-day VaR(6%)| > |one-day VaR(10%)|.

A) I and III only.

B) I only.

C) I, II, and III.

D) II and III only.