MOCK EXAM 1	Last Name: ________ First Name:_________ No: ____________ Date: ____________

Questions 1~25 Relate to Ethical and Professional Standards

1. Most societies would *least likely* consider ethical principles to include:

A. justice.

B. duplicity.

C. diligence.

2. Under what circumstances could a client possibly win a lawsuit against a financial adviser despite the financial adviser abiding by all regulatory and legal requirements?

A. The adviser benefiting more from the relationship than the client

B. The adviser not being subject to a code of ethics

C. The adviser violating his employer's published code of ethics

3. Sato Kashingaki, CFA, is a financial advisor who practices in multiple jurisdictions. In his resident country, Country A, he is not required by law to hold a financial advisor's license but he is required to uphold a fiduciary duty to his clients. In Country B, authorities require him to hold a financial advisor's license, but he is not expected to uphold a fiduciary duty to his clients. In Country C, authorities require both a financial advisor's license and an asset management license in addition to upholding a fiduciary responsibility toward clients. In which of the three countries does Kashingaki have the duty to adhere to the CFA Code and Standards over local laws?

A. Country A.

B. Country B.

C. Country C.

4. Lisa Blackstone, a new CFA charterholder, had to explain to the marketing department of her firm that making any claim of superior analytical skills due to her designation would *most*

likely be a violation of:

A. Standard VII–Responsibilities as a CFA Institute Member or CFA Candidate.

B. Standard V–Investment Analysis, Recommendations, and Actions.

C. Standard IV–Duties to Employers.

5. Linda Chin, CFA, is a member of a political group advocating lower governmental regulation in all aspects of life. She works in a country where local securities laws are minimal and insider trading is not prohibited. Chin's politics are reflected in her investment strategy where she follows her country's mandatory legal and regulatory requirements. Which of the following actions by Chin is *most* consistent with the CFA Institute Standards of Professional Conduct?

A. Follow the CFA Code and Standards.

B. Continue her current investment strategy.

C. Disclose her political advocacy to clients.

6. Andrew Smith, CFA, works for Granite, a commercial bank that also has a sizeable sell side research division. Smith is presenting financing solutions to a potential business client, Dynamic Materials Corp. As part of his presentation, Smith mentions that Granite will initiate research coverage on Dynamic. Is Smith's arrangement *most likely* appropriate with regards to the CFA Standards?

A. Yes.

B. No, because Smith cannot offer to provide research coverage on a company if they become a corporate finance client.

C. No, because Granite cannot provide research coverage on a corporate finance client as this constitutes a violation of research independence.

7. Ricardo Torres, CFA, is a well-respected telecommunications analyst for Pegasus Advisers. He is known for his thorough analysis, including interviews with suppliers, customers, and competitors. Torres has a strong following, and his research reports can often materially affect the market. As a result, Pegasus limits the distribution of his reports to Pegasus clients.

After losing market share to Pegasus for over two years, Marco Rodrigo, a CFA candidate, reports Torres to the local securities regulator on suspicion of using insider information to make share recommendations. What CFA Institute Standard of Professional Conduct has Rodrigo *most likely* violated?

A. Misconduct

B. Material Nonpublic Information

C. Market Manipulation

8. When a client asks her how she makes investment decisions, Petra Vogler, CFA, tells the client she uses mosaic theory. According to Vogler, the theory involves analyzing public and nonmaterial nonpublic information including the evaluation of statements made to her by company insiders in one-on-one meetings where management discusses new earnings projections not known to the public. Vogler also gathers general industry information from industry experts she has contacted. Vogler *most likely* violates the CFA Institute Standards of Professional Conduct because of her use of:

A. industry expert information.

B. one-on-one meeting information.

C. nonmaterial nonpublic information.

9. Richard Cardinal, CFA, is the founder of Volcano Capital Research, an investment management firm whose sole activity is short selling. Cardinal seeks out companies whose stocks have had large price increases. Cardinal also pays several lobbying firms to update him immediately on any legislative or regulatory changes that may impact his target companies. Cardinal sells short those target companies he estimates are near the peak of their sales and earnings and that his sources identify as facing legal or regulatory challenges. Immediately after he sells a stock, Cardinal conducts a public relations campaign to disclose all of the negative information he has gathered on the company, even if the information is not yet public. Which of Cardinal's following actions is *most likely* to be in violation of the CFA Institute Standards of Professional Conduct?

A. Selling stock short

B. Trading on information from lobbyists

C. Disclosing information about target companies

10. David Bravoria, CFA, is an independent financial advisor for a high-net-worth client with whom he had not had contact in more than two years. During a recent brief telephone conversation, the client states that he wants to increase his risk exposure. Bravoria subsequently recommends and invests in several high-risk venture capital funds on behalf of the client. Bravoria continues, as he has done in the past, to send to his client monthly, detailed, itemized investment statements. Did Bravoria *most likely* violate any CFA Standards?

A. No.

B. Yes, with regard to investment statements.

C. Yes, with regard to purchasing venture capital funds.

11. Noor Mawar, CFA, manages a trust fund with the beneficiary being an orphaned 18-year-old student. The investment policy dictates that trust assets are expected to provide the student with a stable low-risk source of income until she reaches the age of 30 years. Based on information from an Internet blog, the student asks Mawar to invest in a new business venture that she expects will provide high returns over the next five years. Mawar ignores the request, instead securing conservative investments to provide sufficient income. Did Mawar *most likely* violate the CFA Institute Code of Ethics and Standards of Professional Conduct?

A. Yes.

B. No, because the client's objectives were met.

C. No, because the investment time frame does not match the investment horizon.

12. Sisse Brimberg, CFA, is responsible for performance presentations at her investment firm. The presentation that Sisse uses states that when making performance presentations her firm:

1. deducts all fees and taxes;

2. uses actual and simulated performance results; and

3. bases the performance on a representative individual account.

Based on the above information, which of the following is the *most* appropriate recommendation to help Brimberg meet the CFA Institute Standards of Professional Conduct in her performance presentations? She should present performance based on:

A. a gross of fee basis.

B. actual not simulated results.

C. a weighted composite for all similar discretionary portfolios.

13. Elbie Botha, CFA, an equity research analyst at an investment bank, disagrees with her research team's buy recommendation for a particular company's rights issue. She acknowledges that the recommendation is based on a well-developed process and extensive research but feels the valuation is overpriced based on her assumptions. Despite her contrarian view, her name is included on the research report to be distributed to all of the investment bank's clients. To avoid violating any CFA Institute Standards, it would be *least* appropriate for Botha to undertake which of the following?

A. Leave her name on the report.

B. Insist her name is removed from the report.

C. Issue a new report based on her conclusions.

14. Jefferson Piedmont, CFA, a portfolio manager for Park Investments, plans to manage the portfolios of several family members in exchange for a percentage of each portfolio's profits. As his family members have extensive portfolios requiring substantial attention, they have requested that Piedmont provide the services outside his employment with Park. Piedmont notifies his employer in writing of his prospective outside employment. Two weeks later, Piedmont begins managing the family members' portfolios. By managing these portfolios, which of the following CFA Institute Standards of Professional Conduct has Piedmont violated?

A. Conflicts of Interest

B. Additional Compensation

C. Both Additional Compensation and Conflicts of Interest

15. Eileen Fisher, CFA, has been a supervisory analyst at SL Advisors for the past ten years. Recently, one of her analysts was found to be in violation of the CFA Institute Standards of Professional Conduct. Fisher has placed limits on the analyst's activities and is now monitoring all of his investment activities. Although SL did not have any compliance procedures up to this point, to avoid future violations, Fischer has put in place procedures exceeding industry standards. Did Fisher *most likely* violate any CFA Institute Standards of Professional Conduct?

A. Yes.

B. No, because she has taken steps to ensure the violations will not be repeated by the analyst.

C. No, because she is taking steps to implement compliance procedures that are more than adequate.

16. Lawrence Hall, CFA, and Nancy Bishop, CFA, began a joint research report on Stamper Corporation. Bishop visited Stamper's corporate headquarters for several days and met with all company officers. Prior to the completion of the report, Bishop was reassigned to another project. Hall utilized his and Bishop's research to write the report but did not include Bishop's name on the report because he did not agree with and changed Bishop's conclusion included in the final report. According to the CFA Institute *Standards of Practice Handbook*, did Hall *most likely* violate any CFA Institute Standards of Professional Conduct?

A. No.

B. Yes, with respect to misrepresentation.

C. Yes, with respect to diligence and reasonable basis.

17. Colin Gifford, CFA, is finalizing a monthly newsletter to his clients, who are primarily individual investors. Many of the clients' accounts hold the common stock of Capricorn Technologies. In the newsletter, Gifford writes, "Based upon the next six month's earnings of $1.50 per share and a 10% increase in the dividend, the price of Capricorn's stock will be $22 per share by the end of the year." Regarding his stock analysis, the *least* appropriate action Gifford should take to avoid violating any CFA Institute Standards of Professional Conduct

would be to:

A. separate fact from opinion.

B. include earnings estimates.

C. identify limitations of the analysis.

18. Suni Kioshi, CFA, is an analyst at Pacific Asset Management, where she covers small capitalization companies. On her own time, Kioshi often speculates in low price thinly traded stocks for her own account. Over the last three months, Kioshi has purchased 50,000 shares of Basic Biofuels Company giving her a 5% ownership stake. A week after this purchase, Kioshi is asked to write a report on stocks in the biofuels industry with a request to complete the report within two days. Kioshi wants to rate Basic as a “buy” in this report but is uncertain how to proceed. Concerning the research report, what action should Kioshi *most likely* take to prevent violating any of the CFA Institute Code of Ethics and Standards of Professional Conduct?

A. Sell her shares.

B. Don’t recommend a buy.

C. Disclose her stock ownership.

19. Wang Dazong, CFA, is a sole proprietor investment advisor. Dazong believes in putting his money at risk along with his clients and trades the same securities as his clients. In order to ensure fair treatment of all accounts, he rotates trade allocations so that each account has an equal likelihood of receiving a fill on their orders. This allocation procedure also applies to Dazong's own account. According to the CFA Institute Code of Ethics and Standards of Professional Conduct, the allocation procedure used by Dazong:

A. complies with the Standards.

B. requires revision to ensure client trades take precedence.

C. should be disclosed and written approval received from clients.

20. A large manufacturing company is seeking help finding a fund manager for its pension plan. After a comprehensive but unsuccessful search, Brett Arun, CFA, is hired to solicit proposals

from various fund managers. The client pays Arun a lump sum fee for his services. The search concludes with Ramport Investments being hired as the pension plan's manager. A year after Ramport is hired, the pension administrator sends Arun a letter telling him how satisfied the pension trustees are with the services provided by the fund manager. Subsequently, without the plan sponsor's knowledge, Arun accepts a payment from Ramport for successfully introducing it to the pension plan under an agreement Arun entered into with Ramport when the initial contact with the fund manager was made. With regard to the payment received, did Arun *most likely* violate the CFA Institute Code of Ethics and Standards of Professional Conduct by accepting the introductory fee?

A. No.

B. Yes, because he did not disclose his acceptance of the introductory fee to the client.

C. Yes, because he should have refused payment of the introductory fee from the fund manager.

21. At the conclusion of the afternoon section of the Level I CFA examination, the exam proctor instructs all candidates to stop writing and put their pencils down immediately. Krishna Chowdary sees other candidates in front of him continue to fill in their answer sheets. Chowdary has two questions left to complete so he randomly fills in one of the ovals on his answer sheet before putting his pencil down on the table. Did Chowdary's actions *most likely*violate the CFA Institute Code of Ethics and Standards of Professional Conduct?

A. Yes.

B. No, because other candidates continued writing.

C. No, because he randomly answered one question.

22. Upon receiving notification that he passed his Level III CFA exam, Paulo Garcia updates his educational background on his social media site by adding "completed the CFA course." Does Garcia *most likely* violate the CFA Institute Standards of Professional Conduct?

A. No.

B. Yes, because it could imply he has obtained the charter.

C. Yes, because he doesn't describe the certification process.

23. Firms that claim compliance with the GIPS® standards are *most likely* allowed to state that performance is calculated in accordance with the GIPS standards when presenting a:

A. GIPS Composite Report to a prospective client.

B. segregated account return to the account owner.

C. GIPS Pooled Fund Report to a prospective investor.

24. Which of the following is *least likely* a requirement of the GIPS® standards? Firms are required to:

A. have their performance records verified by an independent third party.

B. include all discretionary, fee-paying portfolios in at least one composite.

C. present a minimum of five years of annual investment performance compliant with GIPS standards.

25. Milene Fontes, CFA, takes over coverage of a company because the original analyst left the firm before finishing the research report. She adds her own thorough analysis and publishes the report in her name only. Has Fontes violated the Standards?

A. No

B. Yes, by using the original analyst's work in the report

C. Yes, by not attributing the report to the original analyst

Questions 26~42 Relate to Quantitative Methods

26. Assume the following:

- The real risk-free rate of return is 3%.
- The expected inflation premium is 5%.
- The market-determined interest rate of a security is 12%.

The sum of the default risk premium, liquidity premium, and maturity premium for the security is *closest* to:

A. 10%.

B. 4%.

C. 8%.

27. An investor requiring $10,000 in 10 years' time has $7,500 to invest today and has access to the following two accounts:

	Stated annual interest rate	**Compounding frequency**
Account 1	3.0%	Quarterly
Account 2	2.9%	Daily

Which of the accounts will allow the investor to achieve their goal?

A. Account 1 only

B. Account 2 only

C. Both Account 1 and Account 2

28. A consultant starts a project today that will last for three years. Her compensation package includes the following:

Year	**End-of-Year Payment**
1	$100,000
2	$150,000
3	$200,000

If she expects to invest these amounts at an annual interest rate of 3%, compounded annually until her retirement 10 years from now, the value at the end of 10 years is *closest* to:

A. $618,994.

B. $566,466.

C. $460,590.

29. Over a four-year period, a portfolio has returns of 10%, −2%, 18%, and −12%. The geometric mean return across the period is *closest* to:

A. 3.5%.

B. 8.1%.

C. 2.9%.

30. The following ten observations are a sample drawn from an approximately normal population:

Observation	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Value	−31	−14	3	−18	34	20	−6	9	7	−16

The sample standard deviation is *closest* to:

A. 17.56.

B. 19.59.

C. 18.58.

31. The joint probability of returns for securities A and B are as follows:

Joint Probability Function of Security A and Security B Returns (Entries Are Joint Probabilities)

	Return on Security B = 30%	**Return on Security B = 20%**
Return on Security A = 25%	0.60	0
Return on Security A = 20%	0	0.40

The covariance of the returns between Securities A and B is *closest* to:

A. 12.

B. 14.

C. 13.

32. An investor in Abco stock forecasts the probability that Abco exceeded, met, or fell short of consensus expectations for free cash flow (FCF) during the prior quarter:

- *P(FCF exceeded consensus)* = 0.50
- *P(FCF met consensus)* = 0.35

- *P(FCF fell short of consensus)* = 0.15

While waiting for Abco to release last quarter's FCF data, the investor learns that Abco will acquire a competitor. Believing that the upcoming acquisition makes it more likely that last quarter's FCF will exceed the consensus, the investor generates a list of FCF events that may have influenced the acquisition:

- *P(Acquisition | FCF exceeded consensus) = 0.40*
- *P(Acquisition | FCF met consensus) = 0.25*
- *P(Acquisition | FCF fell short of consensus) = 0.35*

Using Bayes' Formula, calculate the probability that Abco is likely to exceed consensus FCF expectations for last quarter given the acquisition. *P(FCF exceeded consensus |Acquisition)* is *closest* to:

A. 34%.

B. 59%.

C. 27%.

33. An analyst determines that 60% of all US pension funds hold hedge funds. In evaluating this probability, a random sample of 10 US pension funds is taken. Using the binomial probability function, the probability that exactly 6 of the 10 firms in the sample hold hedge funds is *closest* to:

A. 60.0%.

B. 11.2%.

C. 25.1%.

34. An investor currently has a portfolio valued at $700,000. The investor's objective is long-term growth, but she will need $30,000 by the end of the year to pay her son's college tuition and another $10,000 by year-end for her annual vacation. The investor is considering three alternative portfolios:

Portfolio	Expected Return	Standard Deviation of Returns	Safety-First Ratio
1			0.2290
2			0.3300
3	14%	22%	

Using Roy's safety-first criterion, which of the alternative portfolios *most likely* minimizes the probability that the investor's portfolio will have a value lower than $700,000 at year-end?

A. Portfolio 1

B. Portfolio 3

C. Portfolio 2

35. A mutual fund manager wants to create a fund based on a high-grade corporate bond index. She first distinguishes between utility bonds and industrial bonds; she then, for each segment, defines maturity intervals of less than 5 years, 5 to 10 years, and greater than 10 years. For each segment and maturity level, she classifies the bonds as callable or noncallable. She then randomly selects bonds from each of the subpopulations she has created. For the manager's sample, which of the following *best* describes the sampling approach?

A. Simple random

B. Systematic

C. Stratified random

36. Which of the following statements about bootstrap resampling is *most* accurate?

A. Multiple samples are taken from the population.

B. In each resample, items are drawn without replacement.

C. The randomly drawn sample is treated as if it were the population.

37. An analysis of US share prices determines that there is consistent underpricing by $0.02 with a *p*-value of 0.0012. Assuming an average transaction cost of $0.05, which statement is *most* accurate? The underpricing result is:

A. statistically significant and indicates a possible arbitrage opportunity.

B. not economically meaningful.

C. not statistically significant.

38. For tests concerning the differences between two normally distributed population means with equal but unknown variances, which of the following test statistics is the *most* appropriate?

A. z-test

B. approximate t-test

C. t-test

39. If a paired comparison test of mean differences supports rejecting the null hypothesis, then the:

A. independence of the samples is statistically significant.

B. standard error of the mean differences is low relative to the sample mean difference.

C. difference in means is not statistically significant.

40. In a simple linear regression model, the residual for an observation of Y is computed as:

A. the observed value of Y divided by the expected value of Y.

B. the unexplained variation in Y divided by the explained variation in Y.

C. the difference between the observed value of Y and the estimated value of Y.

41. An analyst runs a simple linear regression using 35 months of data to assess a country's short-term interest rate as a function of its inflation rate, with the following results:

Source	**Degrees of Freedom**	**Sum of Squares**	**Mean square**
Regression	1	17.3009	17.3009
Error	33	20.2299	0.6130
Total	34	37.5308	

The percentage of the variation in the short-term interest rate that is explained by the inflation rate is *closest* to:

A. 46%.

B. 54%.

C. 61%.

42. Which of the following statements about prediction intervals is *most* accurate? All else being equal:

A. the width of the prediction interval does not depend on the standard error of the estimate.

B. a smaller variation of the independent variable will result in a narrower prediction interval.

C. a larger sample size in the regression estimation will result in a smaller standard error of the forecast.

Questions 43~62 Relate to Economics

43. In a fractional reserve banking system, the reserve requirement is:

A. equal to the money multiplier.

B. the fraction of deposits that may be lent out.

C. inversely correlated with potential money creation.

44. Price elasticity of demand:

A. will be lower if there are many close substitutes for the product.

B. depends on the length of time within which the demand schedule is being considered.

C. measures the amount of change in the quantity demanded given a percentage change in the price of the product.

45. The monthly demand curve for playing tennis at a particular club is given by the following equation: $P_{\text{Tennis Match}} = 9 - 0.20 \times Q_{\text{Tennis Match}}$. The club currently charges members \$4.00 to play a match but is considering adding a membership fee. If the club continues to charge the same per play charge, the most that it will be able to charge as a membership fee is *closest* to:

A. \$62.50.

B. \$162.50.

C. \$40.00.

46. With respect to the relationship between output and costs in the short run, a decline in the marginal cost per unit *most likely* occurs at what level of production?

A. Low output

B. Profit-maximizing output

C. High output

47. For inferior goods:

A. the demand curve is positively sloped.

B. an increase in income causes consumers to buy less.

C. the income and substitution effects reinforce one another.

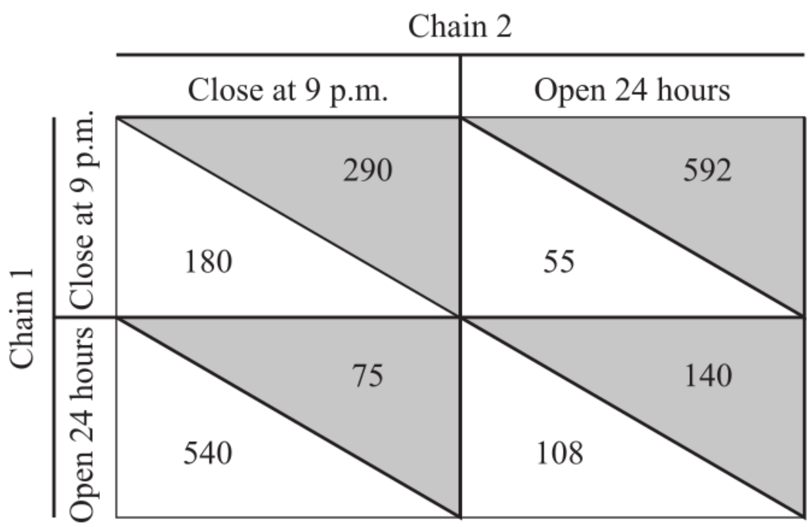
48. A monopolist can charge each customer the highest price the customer is willing to pay under:

A. first-degree price discrimination.

B. second-degree price discrimination.

C. third-degree price discrimination.

49. The two dominant supermarket chains in the area are attempting to increase their market share by moving to 24-hour service instead of closing at 9 p.m. every night. The strategic outcomes and payoff matrix that arise from their actions are depicted in the diagram (with the shaded sections representing payoffs for Chain 2).



The *most likely* Nash equilibrium strategy for the two chains is for:

A. both chains to open for 24 hours.

B. only Chain 2 to open for 24 hours.

C. both chains to close at 9 p.m.

50. Which of the following is *most likely* to cause a shift to the right in the aggregate demand curve?

A. Boom in the stock market

B. Increase in taxes

C. Decrease in real estate values

51. According to the neoclassical growth model, for an economy operating below full potential, a percentage increase in only one input in the production process leads to:

A. no change in output.

B. diminishing marginal returns.

C. the same percentage growth in total output.

52. In which phase of the business cycle is actual output *most likely* below potential output?

A. Recovery

B. Slowdown

C. Expansion

53. Assuming all other factors remain unchanged, which of the following changes would *most likely* cause a simultaneous increase in the participation ratio and a decrease in the unemployment rate?

A. A decrease in the number of unemployed people

B. A decrease in the total population of working-age people

C. An increase in the number of people included in the labor force

54. A rising inventory-sales ratio *most likely* indicates the economy is undergoing a:

A. recovery.

B. slowdown.

C. contraction.

55. Which of the following acts as an automatic stabilizer for the economy?

A. A decrease in corporate tax rates

B. New public spending on hospitals

C. Government expenditure on unemployment benefits

56. Substantial government borrowing is *less likely* to be of concern when:

A. the private sector decreases savings to offset the debt.

B. most of the borrowing is owed internally to local citizens.

C. the private sector is crowded out to make room for the debt.

57. Assuming wages and prices are stable, which of the following policy combinations *most likely* leads to an increase in the private sector's share of GDP?

A. Easy fiscal and easy monetary policy

B. Tight fiscal and easy monetary policy

C. Easy fiscal and tight monetary policy

58. Consider two countries, A and B. Country A, a closed country with a relative abundance of labor, holds a comparative advantage in the production of textiles. Country B has a relative abundance of capital. When the textile trade is opened between the two countries, Country A will *most likely* experience a favorable impact on:

A. labor.

B. both capital and labor.

C. capital.

59. Which of the following *best* describes a function of the International Bank for Reconstruction and Development?

A. Lending foreign currencies on a temporary basis to address balance of payment issues

B. Regulating cross-border trade relationships on a global scale

C. Providing low interest rate loans to developing countries

60. Assume the percentage increases in each of the following listed items:

	Percentage Increase
Real domestic exchange rate (USD/EUR)	5
Eurozone price level	2
US price level	1.5

The predicted change in the nominal US spot exchange rate is *closest* to:

A. 4.5%.

B. –0.5%.

C. 5.5%.

61. Assume the following:

Current spot rate for the USD/EUR	0.7500
Forward rate for the EUR/AUD	1.4300
EUR/AUD forward premium to the spot rate	400 points
USD: US dollar; EUR: Euro; AUD: Australian dollar	

The USD/AUD spot rate is *closest* to:

A. 1.0296.

B. 1.0425.

C. 1.1154.

62. If the domestic currency is trading at a forward premium, then relative to the interest rate of the domestic country, the interest rate in the foreign country is *most likely*:

A. lower.

B. higher.

C. the same.

Questions 63~89 Relate to Financial Statement Analysis

63. Reviewing the MD&A section of an annual report is important because:

A. future revenue projections must be disclosed.

B. accounting policies may require subjective judgment by management.

C. management commentary is typically unaudited.

64. Interim reports *most likely*:

A. are audited.

B. are issued semi-annually or quarterly.

C. include a full set of financial statements and notes.

65. Which of the following statements *best* describes the role of the International Organization of Securities Commissions (IOSCO)? The IOSCO

A. is the oversight body to which the International Accounting Standards Board (IASB) reports.

B. is responsible for regulating financial markets of member nations.

C. assists in attaining the goal of cross-border cooperation in combating violations of securities laws.

66. Company A owns 60% of Company B. Company A's consolidated income statement *most likely* includes 100% of Company A's revenues and expenses and what portion of Company B's?

A. 0%

B. 100%

C. 60%

67. Selected year-end financial data for Smalley Enterprises follows:

Net income	$200,000
Tax rate	15 percent
Weighted average number of common shares outstanding	125,000
12% bond convertible into 3,000 common shares (potentially dilutive)	$60,000

Given this information, Smalley's diluted EPS is *closest* to:

A. $1.61.

B. $1.60.

C. $1.51.

68. An analyst gathers the following annual information on three companies:

	Company A	**Company B**	**Company C**
Sales	$40,000	$200,000	$450,000
Cost of sales	21,000	110,000	240,000
Selling, general and administrative	6,000	24,000	48,000
All other operating expenses	1,000	2,000	5,000
Operating income	12,000	64,000	157,000
Interest and other expense	2,000	0	14,000
Taxes	4,000	26,000	58,000
Net income	$6,000	$38,000	$85,000

The company with the highest gross profit margin is:

A. Company A.

B. Company C.

C. Company B.

69. Which of the following items is *most likely* to appear near the top of the asset section in a liquidity-based presentation of a balance sheet?

A. Land use rights

B. Deferred revenue

C. Marketable securities

70. Which of the following items is *most likely* to be classified as a current asset?

A. A trade payable due to be settled within one year

B. A receivable expected to be collected within one operating cycle

C. Goodwill attributable to an acquisition made in the most recent reporting period

71. Shares which have been repurchased by a company and not canceled are *best* described as:

A. other reserves.

B. treasury shares.

C. minority interest.

72. Which of the following statements is *most* accurate regarding cash flow statements?

A. Under IFRS, the indirect method of preparation is encouraged.

B. Under IFRS, interest paid can be reported either as an operating or as an investing cash flow.

C. Under US GAAP, bank overdrafts should be classified as a financing cash flow.

73. The following information (in millions) on a company is available:

Cost of goods sold	$500
Increase in total assets	$250
Increase in total liabilities	$200
Change in inventory	–$30
Change in accounts payable	–$25

The amount of cash (in millions) that the company paid to its suppliers is *closest* to:

A. $505.

B. $495.

C. $445.

74. An analyst gathers the following information from a company's current financial statements:

Cash Flow Statement for Year Ended 31 December ($ millions)	
Net income	2,520
Depreciation	1,178
Change in accounts receivable	(62)
Change in accounts payable	295
Change in inventory	(792)
Operating cash flow	3,139

Income Statement for Year Ended 31 December ($ millions)	
Revenue	26,430
Cost of goods sold	12,831
Operating expenses	9,802
Income tax expense	1,277
Net income	2,520

If the company uses the direct method to prepare its cash flow statement, the cash paid to suppliers (in $ millions) will be *closest* to:

A. 12,334.

B. 13,328.

C. 12,536.

75. The following information is available about a conglomerate and one of its reportable operating segments:

	Segment A ($ millions)	**Total ($ millions)**
Assets	300	6,000
Liabilities	100	4,000
Capital expenditures	140	550
Revenue	1,250	12,000
Expenses	1,160	11,000
Operating profit	90	1,000

The element of Segment A's financial statement excerpts that *most likely* causes it to qualify as a reportable segment is its:

A. capital expenditures.

B. assets.

C. revenue.

76. By themselves, financial ratios are *least likely* to be sufficient in determining a company's:

A. past performance.

B. creditworthiness.

C. current financial condition.

77. A firm incurred the following costs related to production during the past year:

	$ millions
Fixed production overhead costs	3.0
Raw materials costs	6.0
Labor costs	4.0
Freight-in costs for raw materials	1.0
Warehousing costs for finished goods	2.0

The total capitalized inventory cost for the year is *closest* to:

A. 14.0.

B. 16.0.

C. 13.0.

78. Compared with using the FIFO (first in, first out) method to account for inventory, during a period of rising prices, which of the following is *most likely* higher for a company using LIFO (last in, first out)?

A. Current ratio

B. Gross margin

C. Inventory turnover

79. Under US GAAP, financial statement disclosures relating to inventory are *least likely* to include which of the following? Information about the:

A. reversal of any inventory write-down.

B. amount of inventories pledged as security for liabilities.

C. inventory valuation method used.

80. A company's debt covenant requires it to maintain an interest coverage of 2.25; the ratio is calculated using total interest paid. The following information is taken from the company's 2014 financial statements:

2014	**$ thousands**
Net sales	11,159
Cost of goods sold (COGS)	9,898
Selling and administrative expense (S&A)	872
Interest expense	122
Earnings before tax	267

Note 11: Property and Equipment (all figures in $ thousands)
Depreciation expense for 2014 is $388. This amount includes capitalized interest of $34.
Interest is allocated and capitalized to construction in progress by applying the firm's cost of borrowing rate to qualifying assets. Interest capitalized in 2014 is $66.
Note 13: Long-Term Debt
All bonds were issued at par.

The *most* appropriate statement about the company's debt covenant restriction in 2014 is that the firm:

A. just satisfied it.

B. failed to meet it by at least 5%.

C. exceeded it by at least 5%.

81. A company acquires a product patent at the beginning of Year 1 for $5,000,000 and makes the following assumptions about its use:

	Assumptions and Production
Useful life	Three years
Production capacity	800 units
Units produced in Year 1	300 units
Residual value	0

The company will experience the *highest* asset turnover ratio in the first year under which of the following amortization methods?

A. Double declining balance

B. Straight line

C. Units of production

82. An analyst is reviewing the property, plant, and equipment disclosure related to a company's warehouse. The company uses the International Financial Reporting Standards (IFRS) revaluation model. The analyst would *least likely* be able to determine:

A. the carrying amount under the cost model.

B. how the fair value was obtained.

C. the original date of acquisition.

83. Which of the following events will *most likely* result in a decrease in a valuation allowance for a deferred tax asset under US GAAP? A(n):

A. decrease in interest rates

B. reduction in tax rates

C. extension in the tax loss carry-forward period

84. After issuance, the rate demanded by the purchaser of a bond is *best* described as the:

A. market rate of interest.

B. effective interest rate.

C. coupon rate.

85. Which of the following *best* describes a reason a company would acquire the use of equipment through an operating lease rather than by purchase?

A. To take advantage of less costly financing

B. To obtain preferential tax treatment for the lease payments compared with ownership

C. To increase cash from operations

86. An analyst is comparing the solvency of a company over the past two years using the information below:

2013	**¥millions**
Total debt	2,300
Total shareholders' equity	17,000
Total assets	20,000
Net income	375
Interest payments/interest expense	200
Taxes paid	125
Ratios in 2012	
Debt to capital	12.7%
Interest coverage	2.9

The *best* conclusion the analyst can make about 2013 is that compared with 2012, the company's solvency has:

A. been inconclusive because the ratios give conflicting results.

B. deteriorated because both ratios have weakened.

C. improved because both ratios have strengthened.

87. For a company reporting under IFRS, which of the following events *most likely* represents low financial reporting quality? The company:

A. included gains from foreign exchange rate changes in its cost of goods sold.

B. entered a long-term lease for a customized piece of equipment and classified it as a finance lease.

C. reported an increase in EPS as a result of the sale of a subsidiary.

88. Which of the following conditions conducive to issuing low-quality financial reports is *most likely* a result of poor internal controls?

A. Rationalization

B. Opportunity

C. Motivation

89. A credit analyst considers selected ratios calculated for three companies:

	Company A	**Company B**	**Company C**
EBITDA/Average assets	8.4%	6.2%	4.3%
Debt/EBITDA	2.0	2.8	3.5
Inventory turnover	4.2	5.8	6.3

Based on the information given, which company is *most likely* to receive the highest credit rating?

A. Company C

B. Company A

C. Company B

Questions 90~107 Relate to Corporate Issuers

90. In an acquisition, the interests of minority shareholders are *best* protected through the use of:

A. sell-out rights.

B. clawback provisions.

C. covenants within indentures.

91. In the context of considering ESG factors, “stranded asset” risk most likely applies to companies in which sector?

A. Energy

B. Financial

C. Industrial

92. A project offers the following incremental after-tax cash flows (CF):

Year	**0**	**1**	**2**	**3**	**4**
Cash flow (€)	−12,500	2,000	4,000	5,000	2,000

The appropriate discount rate to use in evaluating the project is 8%. The net present value (NPV) of the project is *closest* to:

A. −€1,780.

B. −€1,736.

C. −€922.

93. Which of the following statements describes the *most* appropriate treatment of cash flows in capital budgeting?

A. Interest costs are included in the project’s cash flows to reflect financing costs.

B. A project is evaluated using its incremental cash flows on an after-tax basis.

C. Sunk costs and externalities should not be included in the cash flow estimates.

94. A common capital allocation pitfall is:

A. basing investment decisions on earnings per share.

B. ignoring sunk costs in the decision-making process.

C. incorporating the responses of competitors into the analysis.

95. Which of the following statements about commercial paper is *most* accurate? Commercial paper is:

A. typically backed by collateral.

B. a long-term source of funding.

C. issued by large, creditworthy companies.

96. An analyst gathers the following information (in $ millions) about three companies:

	Company 1	**Company 2**	**Company 3**
Cash	2.5	2.0	1.5
Short-term marketable instruments	4.0	1.0	1.0
Receivables	2.0	2.0	1.0
Inventory	1.0	1.0	3.0
Current liabilities	5.0	2.5	2.0

Based on the quick ratio, which company exhibits the lowest liquidity risk?

A. Company 1

B. Company 2

C. Company 3

97. An analyst gathers the following information about a company's potential funding sources:

Source of Funds	**Amount**	**Action**
Marketable securities	$100,000	Sell on the market at a 0.5% brokerage fee
Accounts payable	$400,000	Delay accounts payable and forgo a 2% discount

If the company has a $400,000 short-term funding need, the lowest cost strategy to raise funds is to:

A. delay payment on $400,000 of accounts payable.

B. sell $100,000 of marketable securities and delay $300,000 of accounts payable.

C. sell $100,000 of marketable securities and delay $310,000 of accounts payable.

98. The cost of which source of capital *most likely* requires adjustment for taxes in the calculation of a firm’s weighted average cost of capital?

A. Common stock

B. Preferred stock

C. Bonds

99. A company recently issued a 10-year, 6% semiannual coupon bond for $864. The bond has a maturity value of $1,000. If the marginal tax rate is 35%, the after-tax cost of debt (%) is *closest* to:

A. 3.9%.

B. 5.2%.

C. 2.6%.

100. A 20-year $1,000 fixed-rate non-callable bond with 8% annual coupons currently sells for $1,105.94. Assuming a 30% marginal tax rate and an additional risk premium for equity relative to debt of 5%, the cost of equity using the bond-yield-plus-risk-premium approach is *closest* to:

A. 9.9%

B. 12.0%

C. 13.0%

101. An analyst gathers the following information about three companies in the same industry but at different stages of their life cycles:

	Year 1 Revenue ($ millions)	**Year 2 Revenue ($ millions)**	**Year 3 Revenue ($ millions)**	**Year 3 Debt/Capital**
Company 1	10	11	9	0%
Company 2	30	36	44	8%
Company 3	100	95	97	25%

Based only on this information, the company with the greatest capacity to absorb additional leverage in Year 4 is *most likely*:

A. Company 1.

B. Company 2.

C. Company 3.

102. Which of the following statements is *most* accurate? According to Modigliani–Miller Proposition I without taxes:

A. firm value can be created by changing a company's capital structure.

B. any increase in the cost of equity must exactly offset the greater use of lower cost debt.

C. equity holders demand a higher return as leverage increases in order to offset increased risk.

103. All else being equal, which of the following factors is *most likely* to decrease a company's ability to issue a significant amount of debt? Operating in a sector that:

A. is characterized as defensive

B. has low cash flow predictability

C. has a short asset conversion cycle

104. An increase in a company's leverage *most likely* increases the risk-return asymmetry for:

A. debt holders only.

B. equity holders only.

C. both debt and equity holders.

105.

Income Statement	**Millions ($)**
Revenues	9.8
Variable operating costs	7.2
Fixed operating costs	1.5
Operating income	1.1
Interest	0.6
Taxable income	0.5
Tax	0.2
Net income	0.3

The degree of operating leverage (DOL) is *closest* to:

A. 2.4.

B. 1.1.

C. 1.7.

106. Business risk:

A. is the risk associated with operating earnings.

B. is the combination of sales risk and financial risk.

C. reflects the uncertainty with respect to the price and quantity of goods.

107. An analyst gathers the following information about a manufacturing company and its products:

Number of units produced and sold	1,000,000
Contribution margin	$10,000,000
Fixed operating costs	$200,000
Fixed financial costs	$100,000

The operating break-even number of units is:

A. 10,000.

B. 20,000.

C. 30,000.

Questions 108~127 Relate to Equity Investments

108. Which of the following financial intermediaries is *most likely* to provide liquidity service to its clients?

A. Brokers

B. Dealers

C. Exchanges

109. Real estate is *best* classified as a:

A. commodity.

B. physical asset.

C. financial asset.

110. Short positions have the potential for:

A. unbounded gains only.

B. unbounded losses only.

C. both unbounded gains and unbounded losses.

111. Trading in the secondary market *most likely* helps identify the proper price for:

A. a seasoned offering.

B. a best effort offering.

C. an underwritten offering.

112. Which of the following statements regarding rebalancing and reconstitution of an index is *most* accurate?

A. Market-capitalization-weighted indexes require frequent rebalancing.

B. Reconstitution can dramatically affect prices of both current and prospective constituents.

C. Reconstitution is part of index management that reduces the need for rebalancing.

113. The MSCI All Country World Index is *best* described as a:

A. broad market equity index.

B. multi-market equity index.

C. global sector equity index.

114. An investor analyzes the stock market of a specific country and discovers that the stock prices are very slow to reflect new information. The investor can *best* profit from this situation using a(n):

A. active fund.

B. passive fund.

C. low cost approach.

115. Which of the following is *most likely* a cross-sectional anomaly in financial markets?

A. Closed-end fund discount

B. Overreaction effect

C. Value effect

116. In behavioral finance, which of the following statements *best* describes the bias of conservatism? Investors:

A. tend to be slow to react to new information and continue to maintain their prior views or forecasts.

B. focus on issues in isolation and respond to the issues based on how the issues are posed.

C. assess new information and probabilities of outcomes based on similarity to the current state.

117. Participating preference shares are *least likely* to entitle the shareholders to participate in:

A. additional distribution of the company's assets upon liquidation.

B. corporate decisions through voting rights.

C. additional dividends if the company's profits exceed a predetermined level.

118. A company has issued only one class of common shares, and it does not pay dividends on them. It has also issued two types of non-cumulative preference shares: one that is putable

and the other callable. Which of these securities will *most likely* offer the lowest expected return to the investor?

A. Putable preference shares

B. Common shares

C. Callable preference shares

119. Which of the following is *least likely* a primary reason a company would raise capital through the issuance of equity securities? To:

A. finance the purchase of long-lived assets

B. maximize the wealth of shareholders

C. directly satisfy stock compensation plans

120. Industry analysis is *least* useful to those who are engaged in:

A. a top-down investment approach.

B. indexing and passive investing strategies.

C. portfolio performance attribution.

121. Which of the following firms would be *best* classified as operating in a consumer discretionary industry?

A. Tobacco manufacturer

B. Biotechnology

C. Hotel

122. An industry experiencing intense competitive rivalry among incumbent companies is *best* characterized by:

A. differentiated products and low exit barriers.

B. a small number of competitors and low fixed costs.

C. customers basing purchase decisions largely on price.

123. A change in which of the following *best* describes a macroeconomic influence on industry growth?

A. The cost of debt

B. Personal spending habits

C. Population size

124. Expected future benefits to be received from a common share are *most likely* an important input for a(n):

A. asset-based model.

B. multiplier model.

C. present value model.

125. A company's non-callable, non-convertible preferred stock that pays an annual dividend of \$3.75 is currently selling at its par value of \$50 per share. If the required rate of return increases by 75 bps, the preferred stock's new price is *closest* to:

A. \$45.45.

B. \$49.50.

C. \$55.56.

126. An investor wants to estimate the market capitalization of a company located in India and has gathered the following data:

Values (INR millions)	
Market value of debt	10.0
Market value of preferred stock	5.0
Cash and short-term investments	4.5
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	15.0

Assuming an enterprise value multiple of 3.2×, the company's market capitalization (in INR millions) is *closest* to:

A. 28.5.

B. 37.5.

C. 33.0.

127. Given the following information for a company:

- Market value per share $250
- Current dividend per share $5
- Dividend growth rate 4%
- Required rate of return 6%

and using the Gordon growth model to estimate the intrinsic value, a share of the company is *best* described as being:

A. fairly valued.

B. overvalued.

C. undervalued.

Questions 128~147 Relate to Fixed Income

128. China Construction Development Corporation needs to finance a three-year construction project in Singapore. The corporation plans to issue a bond with coupon payments to be paid in Chinese yuan and principal to be repaid in Singapore dollars. This bond is *most likely* an example of a:

A. dual currency bond.

B. currency option bond.

C. foreign currency bond.

129. A bond covenant that prevents the issuance of debt that would be senior to existing bondholders' debt is *best* described as a:

A. negative pledge.

B. restriction on debt.

C. cross-default clause.

130. Centro Corp. recently issued a floating-rate note (FRN) that includes a feature that prevents its coupon rate from falling below a prespecified minimum rate. This feature in an FRN is *most likely* referred to as a:

A. cap.

B. collar.

C. floor.

131. In primary bond markets, the method of allowing certain authorized issuers to offer additional bonds to the general public by preparing a single, all-encompassing offering circular is *most likely* known as a(n):

A. private placement.

B. shelf registration.

C. underwritten offering.

132. Which of the following products provides protection from inflation?

A. Consols

B. Linkers

C. Floaters

133. An inverse floater will *most likely* have:

A. a maximum coupon rate.

B. a face value that changes as the reference rate changes.

C. a coupon rate that changes by more than the change in the reference rate.

134. The value of a 10-year, 6% coupon, $100 par value bond with semiannual payments, assuming an annual discount rate of 7%, is *closest* to:

A. $99.07.

B. $92.89.

C. $107.44.

135. Treasury spot rates on a semiannual bond equivalent yield basis are provided below.

Maturity	**Semiannual Bond Equivalent Yield**
0.5 years	0.40%
1.0 years	0.80%
1.5 years	1.00%
2.0 years	1.10%
2.5 years	1.20%

Using these spot rates, the value of a 2.5-year Treasury security that makes semiannual payments based on a 2% coupon rate is *closest to*:

A. 101.98.

B. 106.88.

C. 99.06.

136. The current yield for a 4.5% coupon, 10-year bond, with a maturity par value of $100 and currently priced at $85.70 is *closest to:*

A. 4.50%.

B. 5.93%.

C. 5.25%.

137. Assume the yields to maturity on four-year and five-year zero-coupon bonds are 4.67% and 5.35%, respectively, stated on a semiannual bond basis. The “4y1y” implied forward rate is *closest* to:

A. 8.092%.

B. 8.114%.

C. 4.046%.

138. Which of the following is *least likely* a form of internal credit enhancement used in a securitization?

A. Subordination

B. Overcollateralization

C. Letter of credit

139. Which investment will *most likely* expose investors to the greatest level of extension risk?

A. Shorter-term tranches in a collateralized mortgage obligation structure

B. Commercial mortgage-backed securities with a balloon payment

C. Planned amortization class tranches in a collateralized mortgage obligation structure

140. Principal payments associated with credit card receivable-backed securities are:

A. distributed to investors as a balloon payment.

B. reinvested after the lockout period.

C. distributed to investors after the lockout period.

141. The sensitivity of a bond’s price to a change in the benchmark yield curve is *best* described as:

A. effective duration.

B. modified duration.

C. the price value of a basis point.

142. The price value of a basis point (PVBP) is *best* interpreted as an estimate of the change in the full price of a bond for a 1 basis point:

A. decrease in the yield to maturity.

B. increase in the yield to maturity.

C. increase and decrease in the yield to maturity.

143. A portfolio consists of four bonds with the following characteristics:

Bond	**Market Value**	**Duration**
A	$1.2 million	3.2
B	$3.4 million	7.6
C	$2.9 million	12.4
D	$1.6 million	1.5

The duration of the portfolio is *closest to*:

A. 7.48.

B. 5.40.

C. 6.18.

144. A positive duration gap indicates that a bond investor is currently:

A. at risk of lower interest rates.

B. at risk of higher interest rates.

C. hedged against interest rate risk.

145. What type of risk *most likely* affects an investor's ability to buy and sell bonds in the desired amounts and at the desired time?

A. Market liquidity

B. Spread

C. Default

146. Which of the following is the *least likely* reason a company would issue subordinated debt? Subordinated debt is less:

A. expensive than equity.

B. restrictive than secured debt.

C. expensive than senior debt.

147. Which of the following is *most likely* an example of a negative covenant?

A. Dividend payout ratio not to exceed 25%

B. Maintain a debt-to-EBITDA ratio of 4.0 or less

C. Company must redeem outstanding debt in event of takeover

Questions 148~158 Relate to Derivatives

148. The value of a swap contract at initiation is *most likely* equal to:

A. zero

B. the present value of the fixed payments of the swap.

C. average price of a series of forward contracts with each forward contract maturing at each swap payment date.

149. Which of the following derivatives is *least likely* to be classified as a contingent claim?

A. A futures contract

B. A call option contract

C. A credit default swap

150. In a currency swap, the underlying principal amount is exchanged:

A. only at the start of the swap.

B. only at the end of the swap.

C. both at the start and at the end of the swap.

151. Which of the following statements *best* describes a feature of an option contract? In an option contract:

A. both the long and the short can default.

B. only the short can default.

C. only the long can default.

152. Relative to spot markets, one key feature of derivatives markets is:

A. high transaction costs.

B. low capital requirements.

C. restrictions on short selling.

153. If a forward contract requires no cash outlay at initiation, it is *most likely* true that at initiation:

A. value exceeds price.

B. price exceeds value.

C. price is equal to value.

154. The value of a long position in a forward contract at expiration is *best* defined as:

A. forward price agreed in the contract minus spot price of the underlying.

B. spot price of the underlying minus forward price agreed in the contract.

C. value of the forward at initiation minus spot price of the underlying.

155. Convenience yield is *best* described as a nonmonetary benefit of holding a(n):

A. option contract.

B. asset.

C. forward contract.

156. The price of a pay-fixed receive-floating interest rate swap is *most likely*:

A. the fixed rate that results in a market value of zero for the swap at initiation.

B. the present value of the floating-rate payments minus the present value of the fixed-rate payments.

C. the sum of the fixed-rate payments minus the sum of the floating-rate payments.

157. A European call option is in the money whenever the value of the underlying is:

A. equal to the exercise price.

B. less than the exercise price.

C. greater than the exercise price.

158. According to put–call–forward parity, for European options, a long put on an asset is equal to:

A. long call + long risk-free bond + short forward.

B. short call + long risk-free bond + short forward.

C. short call + short risk-free bond + long forward.

Questions 159~169 Relate to Alternative Investments

159. Alternative investments are *most likely*:

A. less transparent than traditional investments.

B. more efficiently priced than traditional investments.

C. subject to greater regulation than traditional investments.

160. A manager is compensated with a management fee based on committed capital plus an incentive fee based on fund performance. This scenario *best* describes the fee structure of a:

A. private equity fund.

B. hedge fund.

C. mutual fund.

161. For a hedge fund investor, a benefit of investing in a fund of funds is *least likely* the:

A. higher level of due diligence expertise.

B. multilayered fee structure.

C. ability to negotiate better redemption terms.

162. Which of the following types of private debt is expected to be the riskiest?

A. Mezzanine debt

B. Infrastructure debt

C. Senior direct lending

163. When the futures price of a commodity exceeds the spot price, the commodity market is *most likely* in:

A. contango.

B. backwardation.

C. carry.

164. Investors in alternative assets who seek liquidity are *most likely* to invest in:

A. hedge funds.

B. real estate investment trusts.

C. private equity.

165. Investing in correctional facilities to be constructed and sold to the government is *best* described as a(n):

A. greenfield investment.

B. brownfield investment.

C. an economic infrastructure investment.

166. Which of the following risk measures does the Treynor ratio use?

A. Beta

B. Standard deviation

C. Downside deviation

167. An analyst gathers the following information (in $ millions) about a private equity fund:

	Investment A	**Investment B**	**Total**
Initial cost	100	150	250
Profit/loss	–50	30	–20

The manager's incentive fee is 20% of the profits. If no clawback provision applies, the total incentive fee (in $ millions) under an American-style waterfall is:

A. –4.

B. 0.

C. 6.

168. A measure that is *most likely* well suited to analyzing the performance of alternative investments that may exhibit negative skewness in returns is the:

A. Sortino ratio.

B. Sharpe ratio.

C. safety-first measure.

169. A hedge fund begins the year with $120 million and earns a 25% return for the year. The fund charges a 1.5% management fee on end-of-year fund value and a 15% incentive fee on the return, net of the management fees, that is in excess of a 6% fixed hurdle rate. The fund's investors' return for the year, net of fees, is *closest* to:

A. 20.56%.

B. 21.25%.

C. 19.66%.

Questions 170~180 Relate to Portfolio Management

170. With respect to the portfolio management process, the execution step *most likely* includes:

A. portfolio monitoring.

B. asset allocation.

C. developing the investment policy statement.

171. ABC Company has an obligation to pay a certain amount each month to each of its employees after they retire. This obligation is *most likely* known as a(n):

A. endowment.

B. defined-contribution pension plan.

C. defined-benefit pension plan.

172. The following table presents historical information for two stocks, RTF and KIU:

Variance of returns for RTF	0.0625
Variance of returns for KIU	0.0900
Correlation coefficient between RTF and KIU	0.4500

The covariance between RTF and KIU is *closest* to:

A. 0.0025.

B. 0.0675.

C. 0.0338.

173. An optimal risky portfolio has an expected return of 15% and standard deviation of 20%. The risk-free rate is currently 5%. A risk-seeking investor who is considering investing along the capital allocation line (CAL) would *most likely*:

A. borrow 25% of her wealth at the risk-free rate and invest 125% in the optimal risky portfolio.

B. invest 100% of her wealth in the optimal risky portfolio.

C. lend 100% of her wealth at the risk-free rate.

174. Which of the following is *least likely* an assumption of the capital asset pricing model (CAPM)?

A. Investors are different only with respect to their unique holding periods.

B. An investor can invest as much as he or she desires in any asset.

C. Security prices are not affected by investor trades.

175. Last year, a portfolio manager earned a return of 12%. The portfolio's beta was 1.5. For the same period, the market return was 7.5%, and the average risk-free rate was 2.7%. Jensen's alpha for this portfolio is *closest* to:

A. 4.50%.

B. 2.10%.

C. 0.75%.

176. A portfolio manager decides to temporarily invest more of a portfolio in equities than the investment policy statement prescribes because he expects equities will generate a higher return than other asset classes. This decision is *most likely* an example of:

A. rebalancing.

B. tactical asset allocation.

C. strategic asset allocation.

177. The tendency to estimate the probability of an outcome based on how easily information is recalled *best* describes:

A. availability bias.

B. confirmation bias.

C. illusion of control bias.

178. A portfolio engages in an investment strategy that relies on a particular element of the tax code to produce superior after-tax returns for high-net-worth individuals. Because of this strategy, the portfolio *most likely* faces a high level of:

A. compliance risk.

B. model risk.

C. legal risk.

179. A technical analyst observes a head and shoulders pattern in a stock she has been following. She notes the following information:

Head price	\$83.50
Shoulder price	\$72.00
Neckline price	\$65.75
Current price	\$64.00

Based on this information, her estimate of the price target is *closest* to:

A. \$59.50.

B. \$48.00.

C. \$44.50.

180. An analyst creating a dataset composed largely of product reviews would *most likely* classify the data sources as generated by:

A. sensors.

B. individuals.

C. business processes.