22 MARKET-BASED VALUA... NTERPRISE VALUE MULTIPLES

1. An argument against using the price-to-earnings (P/E) valuation approach is that:
   (A) research shows that P/E differences are significantly related to long-run average stock returns.
   (B) earnings power is the primary determinant of investment value.
   (C) earnings can be negative
   .

2. An analyst has gathered the following dada about Jackson inclk
   - Payout ratio = 60%.
   - Expected growth rate in dividends = 6.7%.
   - Required rate of return = 12.5%.

   What will be the appropriate price-to-book value (PBV) ratio for Jackson, based on fundamentals?
   (A) 0.58.
   (B) 1.73.
   (C) 1.38.

J.K. SHAH CLASSES a Veranda Enterprise

3. An analyst is preparing a presentation on "Interpreting PE ratios" and has the following data:

	Portfolio %	Stock PE
Stock AAA	60%	10
Stock BBB	40%	15

   Which of the following is the most appropriate measure for calculating the portfolio P/E?
   (A) Arithmetic average of the P/E's.
   (B) Weighted harmonic mean of the P/E's.
   (C) Geometric mean of the P/E's.

4. Alpha Software (AS) recently reported annual earnings per share (EPS) of $1.75, which included an extraordinary loss of $0.19 and an expense of $0.10 related to acquisition costs during the accounting period, neither of which are expected to recur. Given that the most recent share price is $65.00, what is a useful AS's trailing price to earnings (P/E) for valuation purposes?
   (A) 31.86.
   (B) 37.14.
   (C) 44.52.

5. The goal of normalizing earnings is to adjust for:
   (A) non-cash charges.
   (B) cyclical elements.
   (C) seasonal elements.

An analyst has gathered the following fundamental data:

	Firm A	Firm A	Firm B	Firm B
Strategy	High Margin	Low Margin	High Margin	Low Margin
	Low Volume	High Volume	Low Volume	High Volume
Payout Ratio	40%	40%	40%	40%
Required Rate of Return	11%	11%	11%	11 %
Growth Rate in Dividends	9%	5%	5%	7%
Sales/Book Value of Equity	1.5	4.5	1.0	3
Profit Margin	10%	2%	9%	4%
Book Value	$150	$150	$125	$125

J.K. SHAH CLASSES a Veranda Enterprise

6. What is the price-to-sales (P/S) multiple for Firm A in the high-margin, low-volume strategy?
   (A) 2.00.
   (B) 0.13.
   (C) 2.18.

7. What is the P/S multiple for Firm B in the low-margin, high-volume strategy?
   (A) 2.00.
   (B) 0.60.
   (C) 0.43.

8. An increase in which of the following variables will least likely result in a corresponding increase in the price-to-book value (PBV) ratio for a high-growth firm?
   (A) Growth rates in earnings.
   (B) Payout ratios.
   (C) Required rate of return

9. Which of the following statements regarding the P/E to growth (PEG) valuation approach is least accurate? The P/E to growth (PEG) valuation approach assumes that:

(A) stocks with higher PEGs are more attractive than stocks with lower PEGs.
(B) there is a linear relationship between price to earnings (P/E) and growth.
(C) there are no risk difference among stocks.

10. A common pitfall in interpreting earnings yields in valuation is:
(A) using negative earnings.
(B) using underlying earnings.
(C) look-ahead bias.

11. An analyst is preparing a presentation on "Interpreting PE ratios" and has the following data:

	Portfolio %	Stock PE
Stock AAA	60%	10
Stock BBB	40%	15

Which of the following is closest to the weighted harmonic mean of these two PE ratios?
(A) 11.54.
(B) 11.98.
(C) 12.49.

J.K. SHAH® CLASSES a Veranda Enterprise

12. The average return on equity (ROE) earnings normalization method relies on:
(A) the earnings yield.
(B) average ROE over the most recent cycle.
(C) average earnings per share (EPS) over the most recent cycle.

At the end of 2x09, Dustin Pedroia, CFA, is writing a report to help advise on a potential corporate takeover. Iliot Inc. is up for sale, and Pedroia's client is considering buying 100% of the share capital.
Pedroia has decided to include two free cash flow valuations in his report for the client. An extract of the most recent cash flow statement, which he intends to use as a base for his first FCF calculation, appears below:

Cash Flow Statement (extract) for the Year Ended 31st December 2x09

	U.S. $ millions
Cash flow from operating activities	130

Extracts from the Financial Statements for 2x09 also show the following:

Financial Statement Extracts	2x08 $m	2x09 $m
Fixed assets (at cost)	270.0	320.0
Less: Accumulated depreciation	112.0	138.0

Inventory	65.2	71.0
Accounts receivable	94.2	96.7
Accounts payable	74.0	79.0

There have been no sales or impairments of fixed assets during the year and net borrowing for 2X09 raised $14 million.

For his first valuation, Pedroia will make a simple assumption that free cash flow to equity will grow at 5% per annum indefinitely in order to reach his valuation. The resulting value will be labelled "Best Case Scenario" in the report.

In addition, the client has passed Pedroia their own forecasts for the performance of Iliot over the next five years, and he also intends to use these forecasts to come up with an alternative valuation, which he will label "FCF Valuation Using Forecasted Cash Flows." Details of the forecasted flows are as follows:

Free Cash Flow to Equity Forecasts: Iliot Inc.

2x10	$65 million
2x11	$68 million
2x12	$72 million
2x13	$75 million

Pedroia will discount the flows at a cost of equity of 12%, and that the 2x10 free cash flow will occur in one year from now. In order to calculate a terminal value at the end of 2x13, Pedroia intends to use an estimate of Iliot's P/E ratio and earnings. He estimates Iliot's trailing P/E ratio at the end of 2x13 to be 28 using a linear regression model based on risk, growth, and dividend payout, and forecasts 2x13 earnings to be $70 million.

Pedroia also wishes to include a note on Iliot's normalized earnings in his final report. He intends to initially calculate normalized EPS figure for 2X09. To do this he will use the method of average return on equity method. In order to assist with this task he notes down various information for Iliot from the last three years:

Iliot Historical Data	2x07	2x08	2x09
Earnings per share	$2.80	$2.50	$2.85
Book value per share	$16.20	$15.80	$16.40
Return on equity	14.8%	15.4%	18.0%

Pedroia intends to conclude his report with a note to the client that he himself owns a small number of Iliot shares. He purchased the shares after implementing a stock screen system of selection, whereby he decided to only purchase shares if they passed the following criteria:

- P/E less than 10
- Market Cap greater than $0.5 billion

- EBITDA-to-free cash flow ratio less than 12
- PEG ratio greater than 1.2

He implemented his stock screen system in mid 2x06. Before implementing the system, Pedroia back tested it using 2x05 year-end ratios published by his favorite analyst's journal in April 2x06. Using those ratios, results showed that if he had bought stocks at the end of 2x05, which passed his screen, he would have made abnormal positive profits.

13. Calculate free cash flow to equity during 2x09 using the data extracted from the 2x09 accounts:
    (A) $90.7 million.
    (B) $94.0 million.
    (C) $120.0 million.

14. The growth assumption Pedroia uses in calculating his "Best Case Scenario" valuation are most suitable if Iliot is:
    (A) a stable firm in a mature industry with a required return on equity of 4%.
    (B) a stable firm in a mature industry with a required return on equity of 14%.
    (C) a growing firm in an infant industry with a required return on equity of 14%.

J.K. SHAH® CLASSES a Veranda Enterprise

15. Calculate the value of equity to the nearest $1 million using a FCFE model and the cash flows / assumptions that Pedroia uses in his "FCF Valuation Using Forecasted Cash Flows" valuation.
    (A) $1,457 million.
    (B) $2,171 million.
    (C) $1,620 million.

16. Which of the following is the normalized earnings figure for 2x10, which will be calculated by Pedroia using the average return on equity method?
    (A) $2.63.
    (B) $2.72.
    (C) $2.59.

17. Which of the following is least likely to be a limitation of the predicted P/E used by Pedroia to calculate the terminal value in his "FCF Valuation Using Forecasted Cash Flows" valuation?
    (A) The predictive power of the estimated regression for a different time period is uncertain.
    (B) The relationship between P/E and the fundamental variables examined will be static.
    (C) Multicollinearity is often a problem in time series regressions such as the one Pedroia has used.

18. Which of the following errors has Pedroia made in back testing his stock screen?

(A) His results are subject to survivorship bias.
(B) His results are likely to suffer from multicollinearity.
(C) His results are likely to suffer from look ahead bias.

19. What is the appropriate price-to-sales (P/S) multiple of a stock that has a retention ratio of 45%, a return on equity (ROE) of 14%, an earnings per share (EPS) of $5.25, sales per share of $245.54, an expected growth rate in dividends and earnings of 6.5%, and shareholders require a return of 11% on their investment?
(A) 0.158.
(B) 0.227.
(C) 0.278.

20. An increase in return on equity (ROE) will cause a price-to-book (P/B) multiple to:
(A) decrease.
(B) there is insufficient information to tell.
(C) increase.

21. What is the justified leading price-to-earnings (P/E) multiple of a stock that has a retention ratio of 60% if the shareholders require a return of 16% on their investment and the expected growth rate in dividends is 6%?
(A) 6.36.
(B) 4.00.
(C) 4.24.

J.K. SHAH CLASSES a Veranda Enterprise

22. At a regional security analysts conference, Sandeep Singh made the following comment: "A PEG ratio is a very useful valuation metric because it generates meaningful results for all equities, regardless of the rate of dividend growth." Is Singh correct?
(A) No, because the PEG ratio generates highly questionable results for low-growth companies.
(B) Yes, because the expected dividend growth rate is cancelled out in the computation of the PEG ratio.
(C) Yes, because the computation of the PEG ratio does include the rate of expected dividend growth.

23. If cash flow from operations (CFO) embeds financing-related flows, it should be adjusted by:
(A) subtracting capital expenditures.
(B) adding (net interest outflow) x (1 – tax rate).
(C) subtracting (net interest outflow) x (1 – tax rate).

24. A common justification for using earnings yields in valuation is that:
    (A) earnings are more stable than dividends.
    (B) negative earnings render P/E ratios meaningless and prices are never negative.
    (C) earnings are usually greater than free cash flows

Analysts and portfolio managers at Big Picture Investments are having their weekly investment meeting. CEO Bob Powell, CFA, believes the firm's portfolios are too heavily weighted toward growth stocks. "I expect value to make a comeback over the next 12 months. We need to get more value stocks in the Big Picture portfolios." Four of Powell's analysts, all of whom hold the CFA charter, were at the meeting — Laura Barnes, Chester Lincoln, Zelda Marks, and Thaddeus Bosley. Powell suggested Big Picture should start selecting stocks with the lowest price-to-earnings (P/E) multiples. Here are the analysts' comments:

- Barnes said numerous academic studies have shown that low P/E stocks tend to outperform those with high P/Es. She uses the P/E ratio as the basis of most of her valuation analysis.
- Lincoln warned against using P/E ratios to evaluate technology stocks. He suggests using price-to-book (P/B) ratios instead, because they are useful for explaining long-term stock returns)
- Bosley prefers the price/sales (P/S) ratio and the earnings yield.
- Marks acknowledges that the P/E ratio is a useful valuation measurement. However, she prefers using the price/free-cash-flow ratio.

J.K. SHAH® CLASSES a Veranda Enterprise

Powell has provided Barnes with a group of small-cap stocks to analyze. The stocks come from a variety of different sectors and have widely different financial structures and growth profiles. She has been asked to determine which of these stocks represent attractive values. She is considering four possible methods for the job:

- The PEG ratio, because it corrects for risk if the stocks have similar expected returns.
- Comparing P/E ratios to the average stock in the Russell 2000 Index, because the benchmark should serve as a good proxy for the average small-cap stock valuation.
- Comparing P/E ratios to the median stock in the Russell 2000 Index, because outliers can skew the average P/E upward.
- The P/S ratio, because it works well for companies in different stages of the business cycle.

25. Barnes is contemplating the use of a price/earnings ratio to value a start-up medical technology firm. Which of the following is the most compelling reason not to use the

P/E ratio?

(A) P/E ratios for medical-technology firms with different specialties are not comparable.

(B) The company is likely to be unprofitable.

(C) Earnings per share are not a good determinant of investment value for medical-technology companies.

26. Based on their responses to Powell, which of the analysts is most likely concerned about earnings volatility?

(A) Lincoln.

(B) Barnes.

(C) Bosley.

27. Barnes would be least likely to use EV/EBITDA ratio, rather than the P/E ratio, when analyzing a company that:

(A) pays a dividend, and is likely to deliver little earnings growth.

(B) reports a lot of depreciation expense.

(C) has a different capital structure than most of its peers.

28. Barnes is considering the four methods previously described to analyze the small-cap stocks provided to her by Powell. For which method does Barnes provide the weakest justification?

(A) The price/sales ratio.

(B) The mean P/E of Russell 2000 companies.

(C) The PEG ratio.

J.K. SHAH® CLASSES a Veranda Enterprise

29. The relative valuation model known as the PEG ratio is equal to:

(A) P/E x earnings.

(B) earnings per share growth rate / price-to-earnings.

(C) price-to-earnings (P/E) / earnings per share (EPS) growth rate.

30. Analyst Ariel Cunningham likes using the price/earnings ratio for valuation purposes because studies have shown it is very effective at identifying undervalued stocks. However, she has one main problem with the statistic — it doesn't work when a company loses money. So Cunningham is considering switching to a different core valuation metric. Given Cunningham's rationale for using the price/earnings ratio, which option would be her best alternative?

(A) Price/cash flow.

(B) Price/sales.

(C) Price/book.

31. The definition of a PEG ratio is price to earnings (P/E):

(A) divided by average historical earnings growth rate.

(B) divided by the average growth rate of the peer group.

(C) divided by the expected earnings growth rate.

32. Enhanced Systems, Inc., has a price to book value (P/B) of five while the median P/B of a peer group of companies within the industry is five. Based on the method of comparables, an analyst would most likely conclude that ESI should be:

(A) bought as an undervalued stock.

(B) sold or sold short as an overvalued stock.

(C) viewed as a properly valued stock.

33. Which of the following is a disadvantage to using EV/EBITDA?

(A) Since FCFF captures the amount of capital expenditures, it is more strongly linked with valuation theory than EBITDA.

(B) EBITDA is useful for valuing capital-intensive businesses with high levels of depreciation and amortization.

(C) EBITDA is usually positive even when EPS is not.

J.K. SHAH® CLASSES a Veranda Enterprise

34. Which of the following statements about cyclical firms is least accurate?

(A) The problems encountered when using the price-to-earnings (P/E) multiples of cyclical firms can be completely eliminated by using average or normalized earnings.

(B) The price-to-earnings (P/E) multiple of a cyclical firm normally peaks at the depths of recession and bottoms out at the peak of economic boom.

(C) Cyclical firms have volatile earnings, and their price-to-earnings (P/E) multiple is not very useful for valuation.

35. A decrease in the earnings retention rate will cause a price-to-sales (P/S) multiple to:

(A) remain the same.

(B) increase.

(C) decrease.

36. Precision Tools is expected to have earnings per share (EPS) of $5.00 per share in five years, a dividend per share of $2.00, a cost of equity of 12%, and a long-term expected growth rate of 5%. What is the terminal trailing price-to-earnings (P/E) ratio in five years?

(A) 7.14.

(B) 9.00.

(C) 6.00.

37. Which of the following price multiples is most severely damaged by international accounting differences?

(A) Enterprise value to earnings before interest, taxes, depreciation, and amortization (EV/EBITDA).

(B) Price to free cash flow to equity (P/FCFE).

(C) Price to cash flow from operations (P/CFO).

38. A method commonly used to normalize earnings is the method of:

(A) comparables.

(B) historical average earnings per share (EPS)

(C) average return on assets.

39. An analyst gathers the following information for ABC Industries:

Market Value of Debt	$110 million
Market Value of Equity	$90 million
Book Value of Debt	$100 million
Book Value of Equity	$50 million
EBITDA	$75 million

The EV/EBITDA is closest to:

(A) 2.67.

(B) 2.13.

(C) 2.00.

40. Two security analysts, Ramon Long and Sri Beujeau, disagree about certain aspects of the PEG ratio. Long argues that: "unlike typical valuation metrics that incorporate dividend discounting, the PEG ratio is unique because it generates meaningful results for firms with negative expected earnings-growth." Is Long correct?

(A) No, because the PEG ratio generates meaningless results for negative earnings- growth companies.

(B) Yes, because the computation of the PEG ratio does not use the rate of expected earnings growth.

(C) Yes, because the expected earnings-growth rate is cancelled out in the computation of the PEG ratio.

41. Shares of TKR Construction (TKR) are selling for $50. Earnings for the last 12 months were $4.00 per share. The average trailing P/E ratio for firms in TKR's industry is 15. The appropriate WACC is 12%, and the risk-free rate is 8%. Assume a growth rate of 0%. Using the method of comparables, what price is indicated for TKR?

(A) $50.00.

(B) $60.00.

(C) $33.33.

42. At a CFA society function, Robert Chan comments to Li Chiao that Xanedu Industries' expected dividend growth rate is 5.5%, dividend payout ratio (g) is 40%, and required return on equity (r) is 12%. Based on a justified leading P/E ratio compared to an actual P/E ratio of 8.0, Xanedu Industries is most likely:
(A) overvalued.
(B) undervalued.
(C) correctly valued.

43. What is the justified trailing price-to-earnings (P/E) multiple of a stock that has a payout ratio of 40% if the shareholders require a return of 16% on their investment and the expected growth rate in dividends is 6%?
(A) 4.24.
(B) 4.00.
(C) 6.36.

44.

Margin and Sales Trade-off for CVR, Inc. and Home, Inc., for Next Year				
Firm	Strategy	Retention Rate	Profit Margin	Sales/Book Value (SBV) of Equity
CVR, Inc.	High Margin / Low Volume	20%	8%	1.25
CVR, Inc.	Low Margin / High Volume	20%	2%	4.00
Home, Inc.	High Margin / Low Volume	40%	9%	2.00
Home, Inc.	Low Margin / High Volume	40%	1%	20.0

Note: CVR, Inc., has a book value of equity of $80 and a required rate of return of 10%. Home, Inc., has a book value of equity of $100 and a required rate of return of 11%.

If Home, Inc., has a required return for shareholders of 11%, what is its appropriate leading price-to-sales (P_0 / S_1) multiple if the firm undertakes the low margin/high volume strategy?
(A) 0.20.
(B) 1.00.
(C) 0.80.

45. In interpreting the standardized unexpected earnings (SUE) momentum measure, it can be concluded that a given size forecast error is:
(A) scaled by the earnings surprise.
(B) more meaningful the larger the historical size of forecast errors.
(C) more meaningful the smaller the historical size of forecast errors.

46. Herb McClain tells Cammy Oren that Kline Industries' expected dividend growth rate is 4.0%, ROE is 14%, and required return on equity (r) is 10%. Based on a justified P/B ratio compared to a P/B ratio (based on market price per share) of 1.55, Kline Industries is most likely:
    (A) undervalued.
    (B) correctly valued.
    (C) overvalued.

Beyan Bautista, CFA, is a sell-side research analyst for a boutique UK investment house. One of the companies she is currently covering is Yantra Plc, a manufacturer of mid-range motorboats, primarily for river use. The company's shares closed at £44.56 on 15 January 20x4. Beyan uses the Treasury bond yield of 2.5% and an assumed market risk premium of 5% when calculating justified ratios based on forecasted fundamentals.

She would first like to calculate Yantra's normalized price-to-earnings ratio over the period 20x0 to 20x3 via the following two methods:

- Method 1 - historical average EPS
- Method 2 - average return on equity

J.K. SHAH® CLASSES

The following table summarizes selected historical data for Yantra Plc. All GBP figures are quoted on a per-share basis:

	20x0	20x1	20x2	20x3
Sales				£32.44
Earnings	£1.57	£2.16	£3.24	£1.89
Dividends				£0.76
FCFE				£1.05
Book value	£10.56	£11.88	£14.21	£15.69
ROE	14.9%	18.2%	22.8%	12.0%
Beta				1.40

Beyan would like to value Yantra using justified trailing price-to-sales and price-to-book ratios based on forecasted fundamentals. She bases the inputs on the most recent data (i.e., 20x3).

Finally, she would like to conclude her valuation by analyzing the justified trailing price- to-cash flow and justified trailing dividend yield metrics. As above, where needed, 20x3 data is used to develop the inputs. Beyan assumes cash flows are growing at a constant rate.

Given the recent lukewarm reception of a new product line at Yantra geared at ocean use, Beyan is considering increasing the cost of equity and reducing the growth rate in her models. She is considering what impact this might have on justified ratios based on forecasted fundamentals such as P/E, P/B, P/S, P/CF, D/P.

Beyan would also like to apply multiples analysis to three of Yantra's closest competitors—Arda, Struma, and Tundzha.

Having read the MD&A of the annual reports of each company, she has highlighted the following points:

Arda : "is in financial hardship due to a recent downturn in its sector"

Struma : "operates in extremely cyclical industry"

Tundzha : "has very different cost structure to the rest of its peers"

Based on the highlighted points, she is deciding on the most appropriate candidate ratio for each of the above companies:

Arda : price-to-earnings or price-to-book

Struma : normalized price-to-earnings or trailing price-to-sales

Tundzha : price-to-earnings or price-to-sales

Beyan has also been recently tasked with covering Nanuk Plc and Nunca Plc, two close competitors developing innovative solutions for marine navigation. She has collected the following information on the two companies (the trailing cash flow per share is calculated as net income per share plus non-cash charges per share):

	Nanuk	Nunca
Share price	38.00	64.00
Trailing CF per share	4.52	9.11
P/CF	8.41	7.03
Trailing FCFE per share	3.11	3.85
P/FCFE	12.22	16.62
5-year growth rate	14%	19%
Beta	1.4	1.4

47. Using the P/E ratio with normalized earnings, Yantra appears to be more attractively valued under:
    (A) Method 1.
    (B) Method 2.
    (C) Neither method as they result in the same conclusion.

48. Using justified trailing price-to-sales and price-to-book ratios based on forecasted fundamentals, Yantra appears to be:
    (A) undervalued.
    (B) overvalued.

(C) the results are mixed.

49. Using justified trailing price-to-cash flow ratio and dividend yield based on forecasted fundamentals, Yantra appears to be:
(A) undervalued.
(B) overvalued.
(C) the results are mixed.

50. If the appropriate adjustments to the five justified ratios are implemented following the launch of the new product line at Yantra, then:
(A) all five ratios will decline.
(B) four ratios will decline.
(C) three ratios will decline.

51. In relation to Arda, Struma, and Tundzha, Beyan should opt for:

	Arda	Struma	Tundzha
(A)	P/B	norm P/E	P/E
(B)	P/B	norm P/E	P/S
(C)	P/E	P/S	P/E

52. In relation to the companies in the marine navigation sector, Nunca is:
(A) undervalued relative to Nanuk.
(B) overvalued relative to Nanuk.
(C) trading at premium due to its superior fundamentals.

J.K. SHAH® CLASSES a Veranda Enterprise

53. Enhanced Systems, Inc., (ESI) has a price to book value (P/B) of four while the median P/B of the stock market overall is three, and the median P/B of companies within the industry is six. Based on the method of comparables, an analyst would most likely conclude that ESI:
(A) is of indeterminate relative value, due to conflicting metrics.
(B) should be sold because it is an overvalued stock.
(C) should be purchased because it is an undervalued stock.

54. An analyst begins an equity analysis of Company A by noting the following ratios from three companies in the same industry:

	EPS	PE
Company A	$1.60	10.0
Company B	$2.10	12.5
Company C	$5.80	13.0

This analyst is most likely using:
(A) the method of comparables.

(B) technical analysis.

(C) the method of forecasted fundamentals.

55. Glad Tidings Gifts (GTG) recently reported annual earnings per share (EPS) of \$2.25, which included an extraordinary loss of \$0.17 and an expense of \$0.12 related to acquisition costs during the accounting period, neither of which are expected to recur. Given that the most recent share price is \$50.00, what is a useful GTG's trailing price to earnings (P/E) for valuation purposes?

(A) 22.22.

(B) 19.69.

(C) 25.51.

56. Which of the following factors is a source of differences in cross-border valuation comparisons?

(A) Accounting methods.

(B) Comparative advantage.

(C) Intra-country market indicators.

57. Which of the following is NOT an advantage of using price-to-book value (PBV) multiples in stock valuation?

(A) PBV ratios can be compared across similar firms if accounting standards are consistent.

(B) Book values are very meaningful for firms in service industries.

(C) Book value is often positive, even when earnings are negative.

58. An analyst has gathered the following data about the Garber Company.

- Payout Ratio = 60%.
- Expected Return on Equity = 16.75%.
- Required rate of return = 12.5%.

What will be the appropriate price-to-book value (PBV) ratio for the Garber Company based on return differential?

(A) 1.73.

(B) 0.58.

(C) 1.38.

59. At a CFA society function, Andrew Caza comments to Nanda Dhople that the expected dividend growth rate (g) for Zeron Enterprises Inc (ZEI) is expected increase 0.5% from 6% to 6.5%. Caza claims that since ZEI will maintain their historic dividend payout ratio (g) of 50% and cost of equity (k) of 10%, ZEI's P/E ratio will also increase by 0.5%. Is Caza correct?

(A) Yes, ZEI's P/E ratio will increase by approximately 0.5%.

(B) No, ZEI's P/E ratio will increase by approximately 14.32%.
(C) No, ZEI's P/E ratio will decrease by approximately 14.32%.

60. An increase in growth will cause a price to cash flow multiple to:
(A) increase.
(B) there is insufficient information to tell.
(C) decrease.

61. Which of the following statements about the method of forecasted fundamentals in price multiple valuation is most accurate?
(A) It relates multiples to company fundamentals using a discounted cash flow (DCF) model.
(B) It relies on the Law of One Price.
(C) It values an asset relative to a benchmark value of the multiple.

62. An analyst is valuing a company with a dividend payout ratio of 0.65, a beta of 0.72, and an expected earnings growth rate of 0.05. A regression on comparable companies produces the following equation:
Predicted price to earnings (P/E) = 7.65 + (3.75 × dividend payout) + (15.35 × growth) – (0.70 x beta)
What is the predicted P/E using the above regression?
(A) 11.39.
(B) 10.35.
(C) 7.65.

J.K. SHAH® CLASSES a Veranda Enterprise

63. Leslie Singer comments to Robert Chan that Dreamtime Industries' expected dividend growth rate is 5.0%, ROE is 14%, and required return on equity (r) is 10%. Based on a justified P/B ratio compared to a P/B ratio (based on market price per share) of 1.60, Dreamtime Industries is most likely:
(A) undervalued.
(B) overvalued.
(C) correctly valued.

64. An increase in profit margin will cause a price-to-sales (P/S) multiple to increase if:
(A) there is insufficient information to tell.
(B) the growth rate in sales does not decrease proportionately.
(C) the required rate of return increases.

65. An analyst is calculating the weighted harmonic mean P/E ratio of a 2-stock portfolio. Stocks AAA and BBB have prices of $12 and $15, respectively, and EPS of $1 and $2, respectively. Which of the following is the weighted harmonic mean P/E of the portfolio closest to?

(A) 9

(B) 9.75

(C) 9.23

Victoria Banks is a senior analyst working for a large firm of portfolio managers. Her manager, David Alan, has asked her to report on a company called Retro Inc. as he believes it might offer a potentially good investment. The accounts for Retro Inc. are given below.

Retro prepares its accounts using U.S. GAAP.

Exhibit 1: Retro Inc. Balance Sheet as at 31 December

	20x9 $m	20x8 $m
Assets		
Cash	150	100
Accounts receivable	1,700	1,620
Inventory	1,810	1,800
Total current assets	**3,660**	**3,520**
Property, plant, and equipment	1,430	1,000
Intangibles	100	150
Total assets	**5,190**	**4,670**
Liabilities and Capital		
Notes payable to banks	200	220
Accounts payable	1,330	1,200
Interest payable	130	100
Total current liabilities	**1,660**	**1,520**
Long-term debt	770	680
Deferred tax	820	820
Common stock	1,300	1,300
Retained earnings	640	380
Total liabilities and capital	**5,190**	**4,670**

Exhibit 2: Retro Inc. Income Statement for the Year Ended 31 December 20x9

	$m
Sales	3,000
Cost of goods sold	(1,800)
Gross profit	**1,200**
Depreciation	(150)

Amortization	(50)
SG&A	(280)
Gain on disposal	(30)
Restructuring charge reversal	(20)
Interest expense	(190)
Income tax expense	(223)
Net income	**(357)**

Retro disposed of PPE in the year that had a cost of $150m and accumulated depreciation at the time of disposal of $90m. No intangibles were disposed of during the year. Deferred tax liabilities are not expected to reverse for the foreseeable future.

Banks is also concerned that the net income looks relatively high when compared to previous years and therefore wants to measure the quality of earnings. She has heard that the lower the accruals ratio the higher the quality of earnings.

Banks calculates that Retro Inc. has a leading P/E ratio of 4.29 and a five-year consensus growth rate forecast at 14.85%. The median PEG, based on leading P/E, for a group of companies comparable in risk to Retro Inc. is 0.82. Based on this Banks wants to determine whether the stock is correctly priced.

One of Banks's colleagues, Jennifer Cery, comments that P/E multiples are not always that useful and that sometimes enterprise value multiples are better. She makes the following comments:

Comment 1:	Enterprise value multiples are useful when comparing firms with different degrees of financial leverage and when EPS is negative
Comment 2:	As EBITDA can be used as a proxy for free cash flow to the firm providing depreciation is close to capital expenditure and the firms levels of working capital is relatively constant.

66. Calculate free cash flow to equity (FCFE):
    (A) 37.
    (B) 127.
    (C) 57.

67. Using the cash flow statement approach calculate the aggregate accruals ratio:
    (A) 11.5%.

(B) 5.7%.
(C) 10.2%.

68. Using the leading P/E ratio of 4.29, determine whether Retro Inc. is most likely under/overvalued based on its PEG ratio:
(A) Overvalued because its PEG ratio is 3.46.
(B) Undervalued because its PEG ratio is 0.29.

69. Regarding the Cery's comments on enterprise value multiples which are most likely correct:

	Comment 1	**Comment 2**
(A)	Correct	Correct
(B)	Correct	Incorrect
(C)	Incorrect	Incorrect

70. A firm has a payout ratio of 40%, a profit margin of 7%, an estimated growth rate of 10%, and its shareholders require a return of 14% on their investment. Based on these fundamentals, a reasonable estimate of the appropriate price-to-sales ratio for the firm (based on trailing sales) is:
(A) 0.77.
(B) 0.56.
(C) 0.70.

J.K. SHAH® CLASSES a Veranda Enterprise

71. A justified price multiple is the:
(A) warranted or intrinsic price multiple.
(B) multiple implied by the market price.
(C) multiple implied by historical growth.

72. At a CFA society function, Robert Chan comments to Li Chiao that the expected dividend growth rate for Xanedu Industries has decreased 0.5% from 6.0% to 5.5%. Chan claims that since Xanedu will maintain their historic dividend payout ratio of 40% and required return on equity (r) of 12%, Xanedu's justified leading P/E ratio based on forecasted fundamentals will also decrease by 0.5%. Is Chan correct?
(A) No, Xanedu's justified leading P/E ratio will increase by approximately 7.8%.
(B) Yes, Xanedu's justified leading P/E ratio will increase by approximately 0.5%.
(C) No, Xanedu's justified leading P/E ratio will decrease by approximately 7.8%.

73. The following data was available for Morris, Inc., for the year ending Dec. 31, 2001:
- Sales per share = $150.

- Earnings per share = $1.75.
- Return on Equity (ROE) = 16%.
- Required rate of return = 12%.

If the expected growth rate in dividends and earning is 4%, what will the appropriate price-to-sales (P/S) multiple be for Morris?

(A) 0.114.

(B) 0.109.

(C) 0.037.

74. The trailing price-to-earnings (P/E) ratio is defined as:

(A) price to next period's expected earnings.

(B) price to most recent earnings.

(C) the average P/E over the last five years.

75. An analyst begins an equity analysis of Company A by estimating future cash flows, discounting them back to the present, and dividing the result by the outstanding number of shares. This analyst is most likely using the:

(A) technical analysis.

(B) the method of forecasted fundamentals.

(C) the method of comparables.

J.K. SHAH® CLASSES a Veranda Enterprise

76. The price-to-book value (PBV) ratio for a high-growth firm will:

(A) increase as the growth rate in either the high-growth or stable-growth period increases.

(B) increase as the growth rate in the high-growth period increases and decrease as the growth rate in the stable-growth period increases.

(C) increase as the growth rate in either the high-growth or stable-growth period decreases.

77. Proprietary Technologies, Inc., (PTI) has a leading price-to-earnings (P/E) ratio of 38 while the median leading P/E of a peer group of companies within the industry is 28. Based on the method of comparables, an analyst would most likely conclude that PTI should be:

(A) sold or sold short as an overvalued stock.

(B) viewed as a properly valued stock.

(C) bought as an undervalued stock.

78. An analyst focusing mostly on financial stocks is likely to prefer valuing stocks via the:

(A) price/book ratio.

(B) price/sales ratio.

(C) dividend yield.

79. Which of the following valuation approaches is based on the rationale that stock values differ due to differences in the expected values of variables such as sales, earnings, or related growth rates?
    (A) Method of comparables.
    (B) Method of forecasted fundamentals.
    (C) Free cash flow to the firm.

80. The Lewis Corp. had revenue per share of $300 in 2001, earnings per share of $4.50, and paid out 60% of its earnings as dividends. If the return on equity (ROE) and required rate of return of Lewis are 20% and 13% respectively, what is the appropriate price/sales (P/S) multiple for Lewis?
    (A) 0.12.
    (B) 0.18.
    (C) 0.19.

81. A firm is better valued using the discounted cash flow approach than the P/E multiples approach when:
    (A) expected growth rate is very high.
    (B) dividend payout is low.
    (C) earnings per share are negative.

J.K. SHAH® CLASSES a Veranda Enterprise

82. The observation that negative price to earnings (P/E) ratios are meaningless and prices are never negative is used to justify which valuation approach?
    (A) Dividend yield.
    (B) Earnings yield.
    (C) Dividend discount model.

83. The net impact of an increase in payout ratio on price-to-book value (PBV) ratio cannot be determined because it might also:
    (A) decrease the market value of the firm.
    (B) decrease required rate of return.
    (C) decrease expected growth.

84. The value of a firm, calculated using the discounted cash flow (DCF) method, will be closest to the valuation using P/E multiples when P/E multiples are estimated using:
    (A) P/E multiples of comparable firms.
    (B) fundamental data.
    (C) historical P/E multiples.

85. A common price to earnings (P/E) based method for estimating terminal value in multi-stage models is the:
   (A) fundamentals approach.
   (B) P/E to growth (PEG) approach.
   (C) dividend yield approach.

86. Which of the following are advantages of using EV/EBITDA?
   (A) EV/EBITDA ignores how different revenue recognition policies affect CFO.
   (B) If working capital is growing, EBITDA will be larger than CFO.
   (C) EBITDA is useful for valuing capital-intensive businesses with high levels of depreciation and amortization.

87. Proprietary Technologies, Inc., (PTI) has a leading price-to-earnings (P/E) ratio of 28 while the median leading P/E of a peer group of companies within the industry is 28. Based on the method of comparables, an analyst would most likely conclude that PTI should be:
   (A) bought as an undervalued stock.
   (B) viewed as a properly valued stock.
   (C) sold or sold short as an overvalued stock.

J.K. SHAH® CLASSES a Veranda Enterprise

88. Which of the following statements about the method of comparables in price multiple valuation is CORRECT?
   (A) It relates multiples to company fundamentals using a discounted cash flow (DCF) model.
   (B) It assumes that cash flows are related to fundamentals.
   (C) It values an asset relative to a benchmark value of the multiple.

89. What is the appropriate justified trailing price-to-earnings (P/E) multiple of a stock that has a payout ratio of 40% if shareholders require a return of 15% on their investment and the expected growth rate in dividends is 5%?
   (A) 4.20.
   (B) 6.30.
   (C) 3.80.

90. An analyst is valuing a company with a dividend payout ratio of 0.35, a beta of 1.45, and an expected earnings growth rate of 0.08. A regression on comparable companies produces the following equation:
   Predicted price to earnings (P/E) = 7.65 + (3.75 x dividend payout) + (15.35 x growth)

– (0.70 x beta)

What is the predicted P/E using the above regression?

(A) 9.18.

(B) 11.21.

(C) 7.65.

91. Which of the following factors is NOT a source of differences in cross-border valuation comparisons?

(A) Intra-country market indicators.

(B) Growth opportunities.

(C) Cultures.

92. Robert Chan comments to Leslie Singer that Converted Industries' expected dividend growth rate is 5.0%, dividend payout ratio (g) is 45%, and required return on equity (r) is 10%. Based on a justified trailing P/E ratio compared to the stock's trailing P/E ratio at market of 9.0, Converted Industries is most likely:

(A) overvalued.

(B) undervalued.

(C) correctly valued.

J.K. SHAH® CLASSES

93. An argument for using the price-to-earnings (P/E) valuation approach is that:

(A) research shows that P/E differences are significantly related to long-run average stock returns.

a Veranda Enterprise

(B) earnings can be negative.

(C) earnings volatility facilitates interpretation.

94. The multiple indicated by applying the discounted cash flow (DCF) model to a firm’s fundamentals is necessarily the:

(A) justified price multiple.

(B) same as the average industry multiple.

(C) result of calculating retention/(required rate of return – growth) for the overall market.

95. An analyst is valuing a company with a dividend payout ratio of 0.55, a beta of 0.92, and an expected earnings growth rate of 0.07. A regression on comparable companies produces the following equation:

Predicted price to earnings (P/E) = 7.65 + (3.75 x dividend payout) + (15.35 x growth) – (0.70 X beta)

What is the predicted P/E using the above regression?

(A) 11.43.

(B) 10.14.

(C) 7.65.

96. Underlying earnings may be defined as earnings:

(A) that exclude non-recurring components.

(B) net of capital expenditures needed to keep the business productive.

(C) that include non-recurring components.

Carol Jenkins, CFA, works as a stock for Cape Cod Partners, a money-management firm that handles private accounts for high net worth clients. Jenkins' assignment is to find attractively valued stocks for client portfolios.

Jenkins believes that recent weakness in the technology sector presents an attractive opportunity. She is looking at Massive Tech, the market leader in chipsets for laptop computers, and Mouse & Associates, a tiny software developer specializing in data-storage programs. Jenkins is considering the companies' relative values in a number of ways. Statistics for Massive and Mouse are provided below:

	Massive Tech	Mouse & Associates
Stock price	$65	$12
Trailing earnings	$4,300	$3.15
Market capitalization	$130,000	$84
Assets	$16,250	$7.00
Equity	$12,000	$5.5
Operating margin	49%	54%
Net margin	12%	22%
Depreciation	$3,500	$6
Amortization	$5,675	$1.5
Fixed investment plus borrowing	$4,200	$0.3
Dividends	$3	$0.02
Shares outstanding	2,000	7

* All figures except stock price, dividends, and percentages are in millions.

In most cases, Jenkins values her stocks relative to an equally-weighted basket of stocks in the same industry in order to avoid significant fundamental differences between companies of different types. However, her picks made based on price/earnings ratios are not doing well against the market. She fears the stocks she selects are not as cheap as she originally thought, relative to her benchmark.

Jenkins also wants to improve Cape Cod's selection of software stocks. To widen the field beyond the companies she currently follows, Jenkins wants to include Canadian software stocks in Cape Cod's research universe. Differences in accounting methodologies are not a concern, but Jenkins is still concerned about the difficulty of valuing the different stocks.

Jenkins has assembled the following data about Canadian software companies:

- Most are very small.
- Most carry little debt, but about 20% are heavily leveraged.
- These companies are more likely to be unprofitable compared to U.S. companies.
- Few pay dividends, as is the case in the U.S.
- Many of the companies are government-subsidized, which leads to drastic differences in the level of operating expenses.

97. Which of the following explanations is least likely to explain why Jenkins' stock picks underperform?
    (A) Large stocks have an outsized effect on the benchmark data.
    (B) She is using the mean rather than the median valuation as a benchmark.
    (C) Many stocks in the benchmark group are mispriced.

J.K. SHAH CLASSES a Veranda Enterprise

98. Which valuation ratio is least appropriate for comparing Massive and Mouse?
    (A) Enterprise value/EBITDA because Massive and Mouse have very different debt levels.
    (B) Price/book because Massive is larger than Mouse.
    (C) Price/cash flow because cash flows for small companies can be extremely volatile.

99. Mouse & Associates is cheaper than Massive Tech as measured by:
    (A) the price/sales ratio and the dividend yield.
    (B) the earnings yield but not the price/book.
    (C) the price/sales ratio and the price/earnings ratio.

100. The price/cash flow ratio of Massive Tech, where cash flow is defined as earnings plus noncash charges, is closest to:
    (A) 16.67.
    (B) 9.65.
    (C) 7.89.

101. Enhanced Systems, Inc., (ESI) has a leading price to sales (P/S) of 0.18 while the median leading P/S of a peer group of companies within the industry is 0.10. Based on

the method of comparables, an analyst would most likely conclude that ESI should be:

(A) bought as an undervalued stock.
(B) sold or sold short as an overvalued stock.
(C) bought on margin as an undervalued stock.

102. One disadvantage of using the price/sales (P/S) multiple for stock valuation is that:
(A) sales are relatively stable and might not change even though earnings and value might change significantly.
(B) profit margins are not consistent across firms within an industry.
(C) P/S multiple does not provide a framework to evaluate the effects of corporate policy decisions and price changes.

103. What is the justified trailing price-to-earnings (P/E) multiple of a stock that has a payout ratio of 65% if the shareholders require a return of 10% on their investment and the expected growth rate in dividends is 6%?
(A) 17.23.
(B) 16.25.
(C) 9.28.

104. Proprietary Technologies, Inc., (PTI) has a leading price-to-earnings (P/E) ratio of 28 while the median leading P/E of a peer group of companies within the industry is 38. Based on the method of comparables, an analyst would most likely conclude that PTI should be:
(A) sold short as an overvalued stock.
(B) sold as an overvalued stock.
(C) bought as an undervalued stock.

J.K. SHAH® CLASSES a Veranda Enterprise

105. Industrial Light had earnings per share (EPS) of $5.00 past year, a dividend per share of $2.50, a cost of equity of 12%, and a long-term expected growth rate of 5%. What is the trailing price-to-earnings (P/E) ratio?
(A) 7.14.
(B) 7.50.
(C) 3.75.

106. Which of the following is a disadvantage of using price-to-sales (P/S) multiples in stock valuations?
(A) It is difficult to capture the effects of changes in pricing policies using P/S ratios.
(B) P/S multiples are more volatile than price-to-earnings (P/E) multiples.
(C) The use of P/S multiples can miss problems associated with cost control.

107. **Margin and Sales Trade-off for CVR, Inc. and Home, Inc., for Next Year**

Firm	Strategy	Retention Rate	Profit Margin	Sales/Book Value (SBV) of Equity
CVR, Inc.	High Margin / Low Volume	20%	8%	1.25
CVR, Inc.	Low Margin / High Volume	20%	2%	4.00
Home, Inc.	High Margin / Low Volume	40%	9%	2.00
Home, Inc.	Low Margin / High Volume	40%	1%	20.0

(**Note:** CVR, Inc., has a book value of equity of $80 and a required rate of return of 10%. Home, Inc., has a book value of equity of $100 and a required rate of return of 11%.)

If CVR, Inc., has a required return for shareholders of 10%, what is its appropriate leading price-to-sales (P/S) multiple if the firm undertakes the high margin/low volume strategy?

(A) 0.80.

(B) 1.46.

(C) 0.20.

J.K. SHAH® CLASSES a Veranda Enterprise

108. Bill Whelan and Chad Delft are arguing about the relative merits of valuation metrics.

Whelan: "My ratio is less volatile than most, and it works particularly well when I look at stocks in cyclical industries."

Delft: "The problem with your ratio is that it doesn't reflect differences in the cost structures of companies in different industries. I like to use a metric that strips out all the fluff that distorts true company performance."

Whelan: "People can't even agree how to calculate your ratio."

Which valuation metric do the analysts most likely prefer?

	Whelan	Delft
(A)	Price/sales	Price/cash flow
(B)	Price/cash flow	Price/book
(C)	Price/book	EV/EBITDA

109. An analyst gathered the following data for TRK Construction [all amounts in Swiss francs (Sf)]:

Recent share price	Sf 25.00
Shares outstanding	40 million
Market value of debt	Sf 130 million
Cash and marketable securities	Sf 65 million
Investments	Sf 250 million

Net income	Sf 150 million
Interest expense	Sf 8 million
Depreciation and amortization	Sf 11 million
Taxes	Sf 52 million

The EV/EBITDA multiple for TRK Construction is closest to:

(A) 4.12x.

(B) 3.69x.

(C) 2.47x.

110. Which of the following is a common momentum valuation indicator?

(A) Relative strength.

(B) Dividend yield (D/P).

(C) Price to free cash flow to equity (P/FCFE).

111. The Farmer Co. has a payout ratio of 70% and a return on equity (ROE) of 14%. What will be the appropriate price-to-book value (PBV) based on fundamentals if the expected growth rate in dividends is 4.2% and the required rate of return is 11%?

(A) 1.50.

(B) 1.44.

(C) 0.64.

J.K. SHAH CLASSES a Veranda Enterprise

112. The Farmer Co. has a payout ratio of 65% and a return on equity (ROE) of 16% (assume that this is expected ROE for the upcoming year). What will be the appropriate price-to-book value (PBV) based on return differential if the expected growth rate in dividends is 5.6% and the required rate of return is 13%?

(A) 0.71.

(B) 1.48.

(C) 1.41.

113. An analyst gathered the following data for TRK Construction [all amounts in Swiss francs (Sf)]:

Recent share price	Sf 30.00
Shares outstanding	Sf 40 million
Market value of debt	Sf 120 million
Cash and marketable securities	Sf 75 million
Investments	Sf 200 million
Net income	Sf 160 million
Interest expense	Sf 9 million
Depreciation and amortization	Sf 12 million
Taxes	Sf 48 million

The EV/EBITDA multiple for TRK Construction is closest to:

(A) 5.21x.
(B) 4.56x.
(C) 3.47x.

114. Which of the following is NOT a common momentum valuation indicator?
(A) Relative strength.
(B) Dividend yield.
(C) Earnings surprise.

115. An increase in growth will cause a price-to-earnings (P/E) multiple to:
(A) decrease.
(B) increase.
(C) there is insufficient information to tell.

116. Earnings before interest, taxes, depreciation, and amortization (EBITDA) is best suited as a measure of:
(A) equity value.
(B) total company value.
(C) debt capacity.

J.K. SHAH® CLASSES a Veranda Enterprise

117. Which of the following measures of cash flow is most closely linked with valuation theory?
(A) Free cash flow to equity (FCFE).
(B) Earnings before interest, taxes, depreciation, and amortization (EBITDA).
(C) Cash flow from operations (CFO).

118. A firm's return on equity (ROE) is 15%, its required rate of return is 12%, and its expected growth rate is 7%. What is the firm's justified price to book value (P/B) based on these fundamentals?
(A) 0.63.
(B) 1.71.
(C) 1.60.

119. P/E multiples are often computed using the average of the multiples of comparable firms, because:
(A) it provides the most accurate results.
(B) it is conceptually very straightforward.
(C) is very easy to find comparable firms that have the same business mix and risk and growth profiles.

120. An analyst gathered the following data for TRK Construction [all amounts in Swiss

francs (Sf)]:

Recent share price	Sf 22.00
Shares outstanding	40 million
Market value of debt	Sf 140 million
Cash and marketable securities	Sf 55 million
Investments	Sf 300 million
Net income	Sf 140 million
Interest expense	Sf 7 million
Depreciation and amortization	Sf 10 million
Taxes	Sf 56 million

The EV/EBITDA ratio for TRK Construction is closest to:

(A) 3.49x.

(B) 3.12x.

(C) 2.52x.

121. What is the appropriate leading price-to-earnings (P/E) multiple of a stock that has a projected payout ratio of 40% if shareholders require a return of 15% on their investment and the expected growth rate in dividends is 5%?

(A) 4.00.

(B) 6.30.

(C) 13.20.

J.K. SHAH® CLASSES a Veranda Enterprise

122. All other variables held constant, the justified price-to-book multiple will decrease with a decrease in:

(A) payout ratio.

(B) expected growth rate.

(C) required rate of return

123. The warranted or intrinsic price multiple is called the:

(A) justified price multiple.

(B) multiple implied by the market price.

(C) multiple implied by historical growth.

124. Which of the following is a disadvantage of using the price-to-book value (PBV) ratio?

(A) Book values are affected by accounting standards, which may vary across firms and countries.

(B) Firms with negative earnings cannot be evaluated with the PBV ratios.

(C) Book value may not mean much for manufacturing firms with significant fixed costs.

125. An analyst has gathered the following fundamental data:

	Firm A	Firm B	Firm C	Firm D
Payout Ratio	75%			

Required rate of Return	12%	12%	12%	12%
Return on Equity (ROE)	20%	15%	30%	14%
Price/ Book Value (PBV) Ratio		3.00	0.70	3.50

What is the PBV ratio for Firm A?

(A) 1.25.
(B) 0.71.
(C) 2.14.

126. An argument for using the price-to-earnings (P/E) valuation approach is that:

(A) management discretion increases the reliability of the ratio.
(B) earnings can be negative.
(C) earnings power is the primary determinant of investment value.

127. Consider the statement: "Unlike many valuation metrics that incorporate dividend discounting, the PEG ratio may be used to value firms with zero expected dividend growth prospects." Is this statement correct?

(A) Yes, because the computation of the PEG ratio does not use the rate of expected dividend growth.
(B) No, because the PEG ratio is undefined for zero-growth companies.
(C) Yes, because the expected dividend growth rate is cancelled out in the computation of the PEG ratio.

J.K. SHAH CLASSES a Veranda Enterprise

128. A firm's return on equity (ROE) is 14%, its required rate of return is 10%, and its expected growth rate is 8%. What is the firm's justified price-to-book value (P/B) based on these fundamentals?

(A) 3.00.
(B) 2.00.
(C) 2.75.

129. For which of the following firms is the Price/Earnings to Growth (PEG) ratio most appropriate for identifying undervalued or overvalued equities?

Firm A: Expected dividend growth = 6%; Cost of equity = 12%; price-to-earnings (P/E) = 12.

Firm B: Expected dividend growth = -6%; Cost of equity = 12%; price-to-earnings (P/E) = 12.

Firm C: Expected dividend growth = 1%; Cost of equity = 12%; price-to-earnings (P/E) = 12.

(A) Firm C.
(B) Firm B.
(C) Firm A.

130. An argument against using the price-to-sales (P/S) valuation approach is that:

(A) P/S ratios do not express differences in cost structures across companies.
(B) P/S ratios are not as volatile as price-to-earnings (P/E) multiples
(C) sales figures are not as easy to manipulate or distort as earnings per share (EPS) and book value.

131. A firm has a return on equity (ROE) of 18%, an estimated growth rate of 13%, and its shareholders require a return of 17% on their investment. Based on these fundamentals, a reasonable estimate of the appropriate price-to-book value ratio for the firm is:
(A) 1.58.
(B) 1.25.
(C) 2.42.

132. Good Sports, Inc., (GSI) has a leading price-to-earnings (P/E) ratio of 12.75 and a 5-year consensus growth rate forecast of 8.5%. What is the firm's P/E to growth (PEG) ratio?
(A) 0.67.
(B) 150.00.
(C) 1.50.