Question #1 of 25

For 2007, Morris Company had 73 days of inventory on hand. Morris would like to decrease its days of inventory on hand to 50. Morris' cost of goods sold for 2007 was $100 million. Morris expects cost of goods sold to be $124.1 million in 2008. Assuming a 365 day year, compute the impact on Morris' operating cash flow of the *change* in average inventory for 2008.

A) $3.0 million source of cash.

B) $6.3 million source of cash.

C) $3.0 million use of cash.

Explanation

2007 inventory turnover was 5 (365 / 73 days in inventory). Given inventory turnover and COGS, 2007 average inventory was $20 million ($100 million COGS / 5 inventory turnover). 2008 inventory turnover is expected to be 7.3 (365 / 50 days in inventory). Given expected inventory turnover, 2008 average inventory is $17 million ($124.1 million COGS / 7.3 expected inventory turnover). To achieve 50 days of inventory on hand, average inventory must decline $3 million ($20 million 2007 average inventory – $17 million 2008 expected inventory). A decrease in inventory is a source of cash.

(Study Session 9, Module 32.1, LOS 32.b)

Question #2 of 25

Baetica Company reported the following selected financial statement data for the year ended December 31, 20X7:

in millions		% of Sales
For the year ended December 31, 20X7:	$500	100%
Sales		
Cost of goods sold	(300)	60%
Selling and administration expenses	(125)	25%
Depreciation	(50)	10%
Net income	$25	5%
As of December 31, 20X7:		
Non-cash operating working capital[a]	$100	20%
Cash balance	$35	N/A

[a]Non-cash operating working capital = Receivables + Inventory – Payables

Baetica expects that sales will increase 20% in 20X8. In addition, Baetica expects to make fixed capital expenditures of $75 million in 20X8. Ignoring taxes, calculate Baetica's expected cash balance, as of December 31, 2008, assuming all of the common-size percentages remain constant.

A) $80 million.

B) $40 million.

C) $30 million.

Explanation

2008 sales are expected to be $600 million ($500 million 2007 sales × 1.2) and 20X8 net income is expected to be $30 million ($600 million 20X8 sales × 5%). 2008 non-cash operating working capital is expected to be $120 million ($600 million 20X8 sales × 20%). The change in cash is expected to be –$5 million ($30 million 20X8 net income + $60 million 20X8 depreciation – $20 million increase in non-cash operating working capital – $75 million 20X8 capital expenditures). The 20X8 ending balance of cash is expected to be $30 million ($35 million beginning cash balance – $5 million decrease in cash).

(Study Session 9, Module 32.1, LOS 32.b)

Question #3 of 25

Selected financial information gathered from Alpha Company and Omega Corporation follows:

	Alpha	Omega
Revenue	$1,650,000	$1,452,000
Earnings before interest, taxes, depreciation, and amortization	69,400	79,300
Quick assets	216,700	211,300
Average fixed assets	300,000	323,000
Current liabilities	361,000	404,400
Interest expense	44,000	58,100

Which of the following statements is *most* accurate?

A) Alpha has a higher operating profit margin than Omega.

B) Omega uses its fixed assets more efficiently than Alpha.

C) Omega has lower interest coverage than Alpha.

Explanation

Using the EBITDA coverage ratio (EBITDA / Interest expense), Omega's EBITDA coverage is 1.4 ($79,300 EBITDA / $58,100 interest expense) and Alpha's EBITDA coverage is 1.6 ($69,400 EBITDA / $44,000 interest expense). Using EBITDA to measure operating profit, Alpha has a lower operating profit margin than Omega. Alpha's EBITDA margin is 4.2% ($69,400 EBITDA / $1,650,000 revenue) and Omega's EBITDA margin is 5.5% ($79,300 EBITDA / $1,452,000 revenue). Using fixed asset turnover to measure the efficiency of fixed assets, Omega uses its fixed assets less efficiently than Alpha. Alpha's fixed asset turnover is 5.5 ($1,650,000 revenue / $300,000 average fixed assets) and Omega's fixed asset turnover is 4.5 ($1,452,000 revenue / $323,000 average fixed assets).

(Study Session 9, Module 32.2, LOS 32.c)

Question #4 of 25

A firm has a debt-to-equity ratio of 0.50 and debt equal to $35 million. The firm acquires new equipment with a 3-year operating lease that has a present value of lease payments of $12 million. The most appropriate analyst treatment of this operating lease will:

A) increase the debt-to-equity ratio to 0.67.

B) leave the debt-to-equity ratio unchanged at 0.5.

C) increase the debt-to-equity ratio to 0.57.

Explanation

Shareholders' equity = $35 million / 0.5 = $70 million. The most appropriate analyst adjustment for an operating lease is to add the present value of lease payments to the firm's assets and long-term debt (leaving equity unchanged). This will result in a debt-to-equity ratio of ($35 million + $12 million) / $70 million = 0.6714.

(Study Session 9, Module 32.2, LOS 32.e)

Question #5 of 25

Would projecting future financial performance based on past trends provide a reliable basis for valuation of the following firms?

Firm #1 – A rapidly growing company that has made numerous acquisitions and divestitures.

Firm #2 – A large, well-diversified, company operating in a number of mature industries.

	Firm #1	Firm #2
A)	No	Yes
B)	No	No
C)	Yes	No

Explanation

Using past trends to project future financial performance would be reliable for a well-diversified firm operating in a number of mature industries. The diversified firm would likely have relatively predictable earnings. Using past trends to project future financial performance would not likely be reliable for the rapidly growing firm involved in numerous acquisitions and divestitures. Such a firm would likely have high earnings volatility.

(Study Session 9, Module 32.1, LOS 32.b)

Question #6 of 25

Sterling Company is a start-up technology firm that has been experiencing super-normal growth over the past two years. Selected common-size financial information follows:

	2007 Actual % of Sales	2008 Forecast % of Sales
Sales	100%	100%
Cost of goods sold	60%	55%
Selling and administration expenses	25%	20%
Depreciation expense	10%	10%
Net income	5%	15%
Non-cash operating working capital[a]	20%	25%

[a] Non-cash operating working capital = Receivables + Inventory – Payables

For the year ended 2007, Sterling reported sales of $20 million. Sterling expects that sales will increase 50% in 2008. Ignoring income taxes, what is Sterling's forecast operating cash flow for the year ended 2008, and is this forecast likely to be as reliable as a forecast for a large, well diversified, firm operating in mature industries?

	Operating cash flow	Reliable forecast	
A)	$4.5 million	No	✗
B)	$4.0 million	No	✓
C)	$4.0 million	Yes	✗

Explanation

2008 sales are expected to be $30 million ($20 million 2007 sales × 1.5) and 2008 net income is expected to be $4.5 million ($30 million 2008 sales × 15%). 2007 non-cash operating working capital was $4 million ($20 million 2007 sales × 20%) and 2008 non-cash operating working capital is expected to be $7.5 million ($30 million 2008 sales × 25%). 2008 operating cash flow is expected to be $4 million ($4.5 million 2008 net income + $3 million 2008 depreciation – $3.5 million increase in non-cash operating working capital). Forecasts for small firms, start-ups, or firms operating in volatile industries may be less reliable than a forecast for a large, well diversified, firm operating in mature industries.

(Study Session 9, Module 32.1, LOS 32.b)

Question #7 of 25

The price to tangible book value ratio subtracts what components from equity?

A) Goodwill and property, plant and equipment. ✗

B) Intangible assets and property, plant and equipment. ✗

C) Goodwill and intangible assets. ✓

Explanation

Price to tangible book value is calculated by removing goodwill and intangible assets from equity. This adjustment reduces assets and equity and produces a ratio that is not affected by differences in intangible asset values that may result from how the assets were acquired.

(Study Session 9, Module 32.2, LOS 32.e)

Question #8 of 25

Comet Corporation is a capital intensive, growing firm. Comet operates in an inflationary environment and its inventory quantities are stable. Which of the following accounting methods will cause Comet to report a lower price-to-book ratio, all else equal?

	Inventory method	Depreciation method	
A)	First-in, First-out	Straight-line	✓
B)	Last-in, First-out	Accelerated	✗
C)	First-in, First-out	Accelerated	✗

Explanation

FIFO results in higher assets and higher equity in an inflationary environment as compared to LIFO. Equity is higher because COGS is lower (and inventory higher) under FIFO. Straight-line depreciation will result in greater assets and equity compared to accelerated depreciation for a stable or growing firm. Equity is greater because depreciation expense is less with straight-line depreciation. Greater equity will result in greater book value per common share, the denominator of the price-to-book ratio. Greater book value per share will result in a lower price-to-book ratio.

(Study Session 9, Module 32.2, LOS 32.e)

Question #9 of 25

A firm that uses higher estimates of assets' useful lives or salvage values relative to its peers will report:

A) higher depreciation expense and higher net income. ✗

B) lower depreciation expense and higher net income. ✓

C) lower depreciation expense and lower net income. ✗

Explanation

Estimates of useful lives or salvage values that are too high will result in lower depreciation expense and higher net income.

(Study Session 9, Module 32.2, LOS 32.e)

Question #10 of 25

Falcon Financial Group is considering the purchase of Company A or Company B based on a low price-to-book investment strategy that also considers differences in solvency. Selected financial data for both firms, as of December 31, 20X7, follows:

in millions, except per-share data	Company A	Company B
Current assets	$3,000	$5,500
Fixed assets	$5,700	$5,500
Total debt	$2,700	$3,500
Common equity	$6,000	$7,500
Outstanding shares	500	750
Market price per share	$26.00	$22.50

The firms' financial statement footnotes contain the following:

- Company A values its inventory using the first in, first out (FIFO) method.
- Company B's inventory is based on the last in, first out (LIFO) method. Had Company B used FIFO, its inventory would have been $700 million higher.
- Company A leases its manufacturing plant. The remaining operating lease payments total $1,600 million. Discounted at 10%, the present value of the remaining payments is $1,000 million.
- Company B owns its manufacturing plant.

To make the firms financials ratios comparable, calculate the adjusted price-to-book ratios for Company A and Company B.

	Company A	Company B	
A)	$1.63	$2.06	✗
B)	$2.17	$2.06	✓
C)	$2.17	$2.81	✗

Explanation

Company A should be adjusted for the operating lease liability and the related assets; however, adding the present value of the lease payments to both assets and liabilities does not change equity (book value). Thus, Company A's adjusted P/B ratio is 2.17 = [$26 price / ($6,000 million equity / 500 million shares)]. Company B's inventory should be adjusted back to FIFO by adding the LIFO reserve to both assets and equity. Thus, Company B's P/B ratio is 2.06 = $22.50 / [($7,500 million equity + $700 million LIFO reserve) / 750 million shares].

(Study Session 9, Module 32.2, LOS 32.e)

Question #11 of 25

Jane Epworth, CFA, is preparing pro forma financial statements for Gavin Industries, a mature U.S. manufacturing firm with three distinct geographic divisions in the Midwest, South and West. Epworth prepares estimates of sales for each of Gavin's divisions using economists' estimates of next-period GDP growth and sums the three estimates to forecast Gavin's sales. Epworth's approach to estimating Gavin's sales is:

A) inappropriate, because sales should be forecast on a firm-wide basis and are unlikely to be related to GDP growth.

B) appropriate.

C) inappropriate, because sales should be forecast on a firm-wide basis.

Explanation

Sales estimates can be more sophisticated than simply estimating a single growth rate. One common approach is to estimate the linear relationship between sales growth and economic growth and use this relationship to estimate sales growth based on economists' forecasts of GDP growth. Segment-by-segment analysis can also be applied, summing segment or division sales forecasts to produce an overall sales forecast for the firm.

(Study Session 9, Module 32.1, LOS 32.b)

Question #12 of 25

National Scooter Company and Continental Chopper Company are motorcycle manufacturing companies. National's target market includes consumers that are switching to motorcycles because of the high cost of operating automobiles and they compete on price with other manufacturers. The average age of National's customers is 24 years.

Continental manufactures premium motorcycles and aftermarket accessories and competes on the basis of quality and innovative design. Continental is in the third year of a five-year project to develop a customized hybrid motorcycle. Which of the two firms would most likely report higher gross profit margin, and which firm would most likely report higher operating expense stated as a percentage of total cost?

	Higher gross profit margin	Higher percentage operating expense
A)	National	Continental
B)	Continental	Continental
C)	Continental	National

Explanation

Continental likely has the highest gross profit margin percentage since it is selling a customized product and does not compete primarily based on price. Because of the research and development costs of developing a new hybrid motorcycle, Continental likely has the higher operating expense stated as a percentage of total cost.

(Study Session 9, Module 32.1, LOS 32.a)

Question #13 of 25

An analyst makes the following two statements:

Statement #1 – From a lender's perspective, higher volatility of a borrower's profit margins is undesirable for floating-rate debt but not for fixed-rate debt.

Statement #2 – Product and geographic diversification should lower a borrower's credit risk.

With respect to these statements:

A) both are correct. ✗

B) only one is correct. ✓

C) both are incorrect. ✗

Explanation

Margin stability is desirable from the lender's perspective for both floating-rate and fixed-rate debt. Higher volatility will increase credit risk. Product and geographic diversification should lower credit risk as the borrower is less sensitive to adverse events and conditions.

(Study Session 9, Module 32.2, LOS 32.c)

Question #14 of 25

A firm recognizes a goodwill impairment in its most recent financial statement, reducing goodwill from $50 million to $40 million. How should an analyst *most appropriately* adjust this financial statement for goodwill when calculating financial ratios?

A) Make no adjustments to assets or earnings because both reflect the impairment. ✗

B) Decrease earnings but make no adjustment to assets. ✗

C) Decrease assets and increase earnings. ✓

Explanation

The recommended adjustment for goodwill before calculating financial ratios is to remove goodwill from the balance sheet (decreasing assets) and reverse any losses recognized due to goodwill impairment (increasing earnings).

(Study Session 9, Module 32.2, LOS 32.e)

Question #15 of 25

To adjust for operating leases before calculating financial statement ratios, what value should an analyst add to a firm's liabilities?

A) Present value of future operating lease payments. ✓

B) Difference between present values of lease payments and the asset's future earnings. ✗

C) Sum of future operating lease obligations. ✗

Explanation

Before calculating ratios involving liabilities, an analyst should estimate the present value of operating lease obligations and add this value to the firm's liabilities.

(Study Session 9, Module 32.2, LOS 32.e)

Question #16 of 25

Other things equal, which of the following firm characteristics are most likely to be viewed favorably by credit rating agencies?

A) Small size, focused product lines, concentrated geographic regions. ✗

B) Large size, diverse product lines, many geographic regions. ✓

C) Large size, diverse product lines, concentrated geographic regions. ✗

Explanation

Other things equal, credit rating agencies tend to rate larger companies and those with diversified product lines and greater geographic diversification to be better credit risks.

(Study Session 9, Module 32.2, LOS 32.c)

Question #17 of 25

An analyst has decided to identify value stocks for investment by screening for companies with high book-to-market ratios and high dividend yields. A potential drawback of using these screens to find value stocks is that the firms selected may:

A) be those that have significantly underperformed the market. ✗

B) have unsustainable dividend payments. ✗

C) be concentrated in specific industries. ✓

Explanation

A screen for firms with high dividend yields and high book-to-market ratios would likely result in an inordinate proportion of financial services companies and add a significant element of industry (sector) risk. Uncertainty about sustainability of dividend payments and recent market underperformance are typical characteristics of value stocks in general and not a drawback to using this screen to identify them.

(Study Session 9, Module 32.2, LOS 32.d)

Question #18 of 25

Cody Scott would like to screen potential equity investments to identify value stocks and selects firms that have low price-to-sales ratios. Unfortunately, screening stocks based only on this criterion may result in stocks that have poor profitability or high financial leverage, which are undesirable to Scott. Which of the following filters could be added to the stock screen to *best* control for poor profitability and high financial leverage?

Filter #1 – Include only stocks with a debt-to-equity ratio that is above a certain benchmark value.

Filter #2 – Include only dividend paying stocks.

Filter #3 – Include only stocks with an assets-to-equity ratio that is below a certain benchmark value.

Filter #4 – Include only stocks with a positive return-on-equity.

	Poor profitability	High financial leverage	
A)	Filter #4	Filter #1	✗
B)	Filter #2	Filter #3	✓
C)	Filter #4	Filter #3	✗

Explanation

Firms that have poor profitability are more likely to be non-dividend paying. Selecting only dividend paying stocks can serve as a check on poor profitability. Using positive ROE to control for poor performance can result in bogus results without additional filters. For example, if both the numerator (net income) and the denominator (average equity) are negative, ROE will be positive. The higher the assets-to-equity ratio, the higher the leverage. Selecting only stocks with an assets-to-equity ratio below a certain cut-off point will eliminate stocks with high leverage. Debt-to-equity above a certain point would include firms with higher, not lower, financial leverage.

(Study Session 9, Module 32.2, LOS 32.d)

Question #19 of 25

An analyst screening potential equity investments to identify value stocks is *most likely* to exclude companies with:

A) high dividend payout ratios. ✗

B) high price-to-earnings ratios. ✓

C) low earnings growth rates. ✗

Explanation

Value stocks are considered to be those that have low prices relative to earnings (or relative to sales, cash flow, or book value). Screens that exclude firms with low earnings growth rates or high dividend payout ratios are more likely to be used to identify growth stocks.

(Study Session 9, Module 32.2, LOS 32.d)

Question #20 of 25

At the end of 2007, Decatur Corporation reported last-in, first-out (LIFO) inventory of $20 million, cost of goods sold (COGS) of $64 million, and inventory purchases of $58 million. If the LIFO reserve was $6 million at the end of 2006 and $16 million at the end of 2007, compute first-in, first-out (FIFO) inventory at the end of 2007 and FIFO COGS for the year ended 2007.

	FIFO Inventory	FIFO COGS	
A)	$26 million	$54 million	✗
B)	$36 million	$74 million	✗
C)	$36 million	$54 million	✓

Explanation

2007 FIFO inventory was $36 million ($20 million LIFO inventory + $16 million reserve). 2007 FIFO COGS was $54 million ($64 million LIFO COGS – $10 million increase in LIFO reserve).

(Study Session 9, Module 32.2, LOS 32.e)

Question #21 of 25

LIFO ending inventory can be adjusted to a FIFO basis by:

A) subtracting the change in the LIFO reserve. ✗

B) adding the change in the LIFO reserve. ✗

C) adding the LIFO reserve. ✓

Explanation

LIFO ending inventory can be adjusted to a FIFO basis by adding the LIFO reserve, which a firm using LIFO must disclose in the notes to its financial statements.

(Study Session 9, Module 32.2, LOS 32.e)

Question #22 of 25

Patch Grove Nursery uses the LIFO inventory accounting method. Maria Huff, president, wants to determine the financial statement impact of changing to the FIFO accounting method. Selected company information follows:

- Year-end inventory: $22,000
- LIFO reserve: $4,000
- Change in LIFO reserve: $1,000
- LIFO cost of goods sold: $18,000
- After-tax income: $2,000
- Tax rate: 40%

Under FIFO, the nursery's ending inventory and after-tax profit for the year would have been:

	FIFO ending inventory	FIFO after-tax profit	
A)	$26,000	$2,600	✓
B)	$18,000	$2,600	✗
C)	$26,000	$1,400	✗

Explanation

FIFO ending inventory = LIFO ending inventory + LIFO reserve = 22,000 + 4,000 = $26,000

FIFO after-tax profit = LIFO after-tax profit + (change in LIFO reserve)(1 – t) = $2,000 + ($1,000)(1 – 0.4) = $2,000 + $600 = $2,600

(Study Session 9, Module 32.2, LOS 32.e)

Question #23 of 25

In estimating pro forma cash flows for a company, analysts typically hold which of the following factors constant?

A) Sales. ✗

B) Noncash working capital as a percentage of sales. ✓

C) Repayments of debt. ✗

Explanation

To estimate pro forma cash flows, the analyst must make assumptions about future sources and uses of cash. The most important of these will be increases in working capital, capital expenditures on new fixed assets, issuance or repayments of debt, and issuance or repurchase of stock. A typical assumption is that noncash working capital will remain constant as a percentage of sales.

(Study Session 9, Module 32.1, LOS 32.b)

Question #24 of 25

Portsmouth Industries has stated that in the market for their medical imaging product, their strategy is to grow their market share in the premium segment by leveraging their research and development capabilities to produce machines with greater resolution for the most challenging cases of spinal degeneration. An analyst examining their financials for subsequent periods would *most likely* conclude that they are successfully pursuing this strategy if she finds:

A) an increase in revenue and operating margins. ✗

B) an increase in gross margins greater than the increase in operating margins. ✓

C) increasing research and development expense and decreasing operating margins. ✗

Explanation

A shift to premium, rather than commodity-like, products should result in higher gross margins, higher average revenue per unit (selling price per unit), and an increase in gross margins relative to operating margins (because of the increase in R&D and marketing expenditures). A successful shift to a premium product should increase operating margins rather than increase operating income through increased unit sales. Revenue would not necessarily increase as the company shifted to premium products.

(Study Session 9, Module 32.1, LOS 32.a)

Question #25 of 25

When assessing credit risk, which of the following ratios would *best* measure a firm's tolerance for additional debt and a firm's operational efficiency?

Ratio #1 – Retained cash flow (CFO – dividends) divided by total debt.

Ratio #2 – Current assets divided by current liabilities.

Ratio #3 – Earnings before interest, taxes, depreciation, and amortization divided by revenues.

	Tolerance for leverage	Operational efficiency	
A)	Ratio #1	Ratio #3	✓
B)	Ratio #3	Ratio #1	✗
C)	Ratio #2	Ratio #3	✗

Explanation

A firm's tolerance for additional debt can be measured by its capacity to repay debt. Retained cash flow divided by total debt is one of several measures that can be used. Operational efficiency refers to the firm's cost structure and can be measured by the "margin" ratios. EBITDA divided by sales is one version of an operating margin ratio. The current ratio is a measure of short-term liquidity.

(Study Session 9, Module 32.2, LOS 32.c)