

### Question #1 of 24

Question ID: 1457945

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.

<u>FIFO Inventory.</u>	<u>FIFO COGS</u>
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A) \$36 million	\$74 million
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B) \$36 million	\$54 million
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C) \$26 million	\$54 million
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#### 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).

(Module 27.2, LOS 27.e)

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### Question #2 of 24

Question ID: 1457929

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?

<u>Higher gross profit margin</u>	<u>Higher percentage</u>
	<u>operating expense</u>

- |                       |             |   |
|-----------------------|-------------|---|
| <b>A)</b> Continental | National    |   |
| <b>B)</b> Continental | Continental |  |
| <b>C)</b> National    | Continental |  |

**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.

(Module 27.1, LOS 27.a)

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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:

<b>in millions, except per-share data</b>	<b>Company A</b>	<b>Company B</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.

	<u>Company A</u>	<u>Company B</u>	
<b>A)</b>	\$1.63	\$2.06	
<b>B)</b>	\$2.17	\$2.06	
<b>C)</b>	\$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  $2.17 = [\text{\$26 price} / (\text{\$6,000 million equity} / 500 \text{ million shares})]$ . 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  $2.06 = \text{\$22.50} / [(\text{\$7,500 million equity} + \text{\$700 million LIFO reserve}) / 750 \text{ million shares}]$ .




(Module 27.2, LOS 27.e)

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### Question #4 of 24

Question ID: 1462858

The *most likely* problem with using financial statement ratios to screen for stocks to include in a portfolio is that:

- A) specific industries are often over-represented. 
- B) firms with undesirable characteristics will be included. 
- C) firm characteristics are not identified well by financial statement measures. 

#### Explanation

It is often the case a screening metric, such as low P/E, high dividend yield, or high ROE, will identify many stocks in the same industry. Undesirable characteristics can be avoided by including additional screening metrics. Financial statement measures provide a great amount of information about a firm's characteristics. (Module 27.2, LOS 27.d)

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### Question #5 of 24

Question ID: 1457936

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) both are incorrect. 
- C) only one is correct. 

#### 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.




(Module 27.2, LOS 27.c)

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### Question #6 of 24

Question ID: 1457952

Among companies in a peer group for analysis, which of the following accounting differences would make the estimated useful life of property, plant, and equipment appear to be lower if an analyst does not adjust for them?

- A) U.S. GAAP cost model, if peer companies use the IFRS cost model. 
- B) Higher estimated salvage values compared to those of peer companies. 
- C) Accelerated depreciation, if peer companies use straight-line depreciation. 

#### Explanation

Estimated useful life of PP&E assets (gross PP&E / annual depreciation expense) is likely to be lower for a company that uses an accelerated depreciation method than for a company that uses straight-line depreciation. Higher salvage values would decrease annual depreciation expense and increase estimated useful life. The cost model is identical under IFRS and U.S. GAAP.




(Module 27.2, LOS 27.e)

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### Question #7 of 24

Question ID: 1457930

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 gross margins greater than the increase in operating margins. 
- B) an increase in revenue and 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.




(Module 27.1, LOS 27.a)

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**Question #8 of 24**

Question ID: 1457947

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) Sum of future operating lease obligations. 
- C) Difference between present values of lease payments and the asset's future earnings. 

**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.




(Module 27.2, LOS 27.e)

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**Question #9 of 24**

Question ID: 1457943

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?

- | <u>Inventory method</u> | <u>Depreciation method</u> |   |
|-------------------------|----------------------------|---|
| A) Last-in, First-out   | Accelerated                |  |
| B) First-in, First-out  | Accelerated                |  |
| C) First-in, First-out  | Straight-line              |  |

**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.




(Module 27.2, LOS 27.e)

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**Question #10 of 24**

Question ID: 1457934

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

**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.

(Module 27.1, LOS 27.b)

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**Question #11 of 24**




Question ID: 1457931

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	<u>10%</u>	<u>10%</u>
Net income	5%	15%
Non-cash operating working capital <sup>a</sup>	20%	25%

<sup>a</sup> 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?

	<u>Operating cash flow</u>	<u>Reliable forecast</u>	
<b>A)</b> \$4.0 million	No		
<b>B)</b> \$4.0 million	Yes		
<b>C)</b> \$4.5 million	No		

### 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.

(Module 27.1, LOS 27.b)



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 use of cash.
- B) \$6.3 million source of cash.
- C) \$3.0 million source 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.

(Module 27.1, LOS 27.b)

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### Question #13 of 24

Question ID: 1457940

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

- A) high dividend payout ratios.
- B) low earnings growth rates.
- C) high price-to-earnings ratios.



#### 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.

(Module 27.2, LOS 27.d)

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### Question #14 of 24

Question ID: 1457938

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) Omega has lower interest coverage than Alpha. 
- B) Omega uses its fixed assets more efficiently than Alpha. 
- C) Alpha has a higher operating profit margin than Omega. 

#### 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).



(Module 27.2, LOS 27.c)

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### Question #15 of 24

Question ID: 1457941

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.

(Module 27.2, LOS 27.d)

### Question #16 of 24

Question ID: 1457932

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 <sup>a</sup>	\$100	20%
Cash balance	\$35	N/A

<sup>a</sup>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) \$40 million.



B) \$80 million.



C) \$30 million.



### Explanation

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

(Module 27.1, LOS 27.b)

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### Question #17 of 24

Question ID: 1457935

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

A) Repayments of debt.



B) Noncash working capital as a percentage of sales.



C) Sales.



### 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.

(Module 27.1, LOS 27.b)

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### Question #18 of 24

Question ID: 1457946

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:

	<u>FIFO ending inventory</u>	<u>FIFO after-tax profit</u>	
<b>A)</b>	\$26,000	\$2,600	
<b>B)</b>	\$18,000	\$2,600	
<b>C)</b>	\$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




(Module 27.2, LOS 27.e)

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#### Question #19 of 24

Question ID: 1457949

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.




(Module 27.2, LOS 27.e)

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**Question #20 of 24**

Question ID: 1457939

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

- A) Large size in a concentrated geographic region. 
- B) Large size and diverse product lines. 
- C) Focused product line in widespread 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.




(Module 27.2, LOS 27.c)

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**Question #21 of 24**

Question ID: 1457948

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).

(Module 27.2, LOS 27.e)

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**Question #22 of 24**

Question ID: 1457950

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

- A) lower depreciation expense and lower net income. ✗
- B) higher depreciation expense and higher net income. ✗
- C) lower depreciation expense and higher net income. ✓

#### Explanation

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

(Module 27.2, LOS 27.e)

### Question #23 of 24

Question ID: 1457937

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 #2 | Ratio #3 | ✗ |
| B) Ratio #1 | Ratio #3 | ✓ |
| C) Ratio #3 | Ratio #1 | ✗ |

#### 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.

(Module 27.2, LOS 27.c)

### Question #24 of 24

Question ID: 1457951

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



**B)** increase the debt-to-equity ratio to 0.57.



**C)** increase the debt-to-equity ratio to 0.67.



#### **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.

(Module 27.2, LOS 27.e)