



# **Corporate Finance: The Core (Berk/DeMarzo) Chapter 2 - Introduction to Financial Statement Analysis**

# 2.1 The Disclosure of Financial Information

1) U.S. public companies are required to file their annual financial statements with the U.S. Securities and Exchange Commission on which form?

A) 10-A B) 10-K C) 10-Q D) 10-SEC Answer: B Explanation: A) B) C) D) Diff: 1 Topic: 2.1 The Disclosure of Financial Information

Skill: Definition

2) Which of the following is not a financial statement that every public company is required to produce?

- A) Income Statement
- B) Statement of Sources and Uses of Cash
- C) Balance Sheet
- D) Statement of Stockholders' Equity

Answer: B

Explanation: A)

- B)
  - C)
- D)

Diff: 2

Topic: 2.1 The Disclosure of Financial Information Skill: Conceptual

- 3) The third party who checks annual financial statements to ensure that they are prepared according to GAAP and verifies that the information reported is reliable is the
  - A) NYSE Enforcement Board.
  - B) Accounting Standards Board.
  - C) Securities and Exchange Commission (SEC).

D) auditor.

Answer: D

Explanation: A)

- B) C)
- D)

Diff: 1

Topic: 2.1 The Disclosure of Financial Information Skill: Definition

#### 4) What is the role of an auditor in financial statement analysis?

Answer: Key points:

- 1. To ensure that the annual financial statements are prepared accurately.
- 2. To ensure that the annual financial statements are prepared according to GAAP.
- 3. To verify that the information used in preparing the annual financial statements is reliable.

Diff: 2

Topic: 2.1 The Disclosure of Financial Information Skill: Conceptual

## 5) What are the four financial statements that all public companies must produce?

Answer: 1. Balance Sheet

- 2. Income Statement
- 3. Statement of Cash Flows
- 4. Statement of Stockholder's Equity

Diff: 2

Topic: 2.1 The Disclosure of Financial Information Skill: Conceptual

## 2.2 The Balance Sheet

1) Which of the following balance sheet equations is incorrect?

A) Assets - Liabilities = Shareholders' Equity

B) Assets = Liabilities + Shareholders' Equity

C) Assets - Current Liabilities = Long Term Liabilities

D) Assets - Current Liabilities = Long Term Liabilities + Shareholders' Equity

Answer: C

Explanation: A)

- B)
  - C)
  - D)

Diff: 2

Topic: 2.2 The Balance Sheet Skill: Conceptual

#### 2) Cash is a

A) Long-term asset. B) Current Asset. C) Current Liability. D) Long-term liability. Answer: B Explanation: A) B) C) D) Diff: 1 Topic: 2.2 The Balance Sheet

Skill: Definition

3) Accounts payable is a

A) Long-term liability.

B) Current Asset.

C) Long-term asset.

D) Current Liability.

Answer: D

Diff: 1

- Explanation: A)
  - B)
  - C) D)

Topic: 2.2 The Balance Sheet Skill: Definition

4) A 30 year mortgage loan is a

- A) Long-term liability.
- B) Current Liability.
- C) Current Asset.

D) Long-term asset.

Answer: A

Explanation: A) B) C) D)

Diff: 1 Topic: 2.2 The Balance Sheet Skill: Definition

5) Which of the following statements regarding the balance sheet is incorrect?

A) The balance sheet provides a snapshots of the firm's financial position at a given point in time.

- B) The balance sheet lists the firm's assets and liabilities.
- C) The balance sheet reports stockholders' equity on the right hand side.
- D) The balance sheet reports liabilities on the left hand side.

Answer: D

Explanation: A) B) C) D) Diff: 2 Topic: 2.2 The Balance Sheet Skill: Conceptual Consider the following balance sheet:

	I	uther Co	orporation		
	Cons	olidated	Balance Sheet		
Dece	ember 31	l, 2006 ar	nd 2005 (in \$ millions)		
			Liabilities and		
Assets	2006	2005	Stockholders' Equity	2006	2005
Current Assets			Current Liabilities		
Cash	63.6	58.5	Accounts payable	87.6	73.5
			Notes payable /		
Accounts receivable	55.5	39.6	short-term debt	10.5	9.6
			Current maturities of long-		
Inventories	45.9	42.9	term debt	39.9	36.9
Other current assets	6.0	3.0	Other current liabilities	6.0	12.0
Total current assets	171.0	144.0	Total current liabilities	144.0	132.0
Long-Term Assets			Long-Term Liabilities		
Land	66.6	62.1	Long-term debt	239.7	168.9
Buildings	109.5	91.5	Capital lease obligations		
Equipment	119.1	99.6	Total Debt	239.7	168.9
Less accumulated					
depreciation	(56.1)	(52.5)	Deferred taxes	22.8	22.2
Net property, plant, and					
equipment	239.1	200.7	Other long-term liabilities		
Goodwill	60.0		Total long-term liabilities	262.5	191.1
Other long-term assets	63.0	42.0	Total liabilities	406.5	323.1
Total long-term assets	362.1	242.7	Stockholders' Equity	126.6	63.6
			Total liabilities and		
Total Assets	533.1	386.7	Stockholders' Equity	533.1	386.7
	00011	0000	Stockholucio Equity		
6) What is Luther's ne	t workin	ıg capital	in 2005?		
A) \$12 million					

B) \$27 million

C) \$39 million

D) \$63.6 million

Answer: A

A) NWC = current assets - current liabilities = 144 - 132 = \$12 million Explanation:

- B) C)
- D)

Diff: 2

Topic: 2.2 The Balance Sheet Skill: Analytical

7) If in 2006 Luther has 10.2 million shares outstanding and these shares are trading at \$16 per share, then Luther's Market-to-book ratio would be closest to:

A) 0.39 B) 0.76 C) 1.29 D) 2.57 Answer: C Explanation: A) B) C) MTB = market cap / book value of equity =  $(10.2 \text{ million} \times 16) / 126.6 = 163.2 / 126.6 = 1.289$ D) Diff: 2 Topic: 2.2 The Balance Sheet Skill: Analytical

8) When using the book value of equity, the debt to equity ratio for Luther in 2006 is closest to:

A) 2.21 B) 2.29 C) 2.98 D) 3.03 Answer: B Explanation: A) B) D/E = Total Debt / Total Equity Total Debt = (notes payable (10.5) + current maturities of long-term debt (39.9) + long-term debt (239.7) = 290.1 million Total Equity = 126.6, so D/E = 290.1 / 126.6 = 2.29 C) D) Diff: 2 Topic: 2.2 The Balance Sheet Skill: Analytical

9) If in 2006 Luther has 10.2 million shares outstanding and these shares are trading at \$16 per share, then using the market value of equity, the debt to equity ratio for Luther in 2006 is closest to:

A) 1.71 B) 1.78 C) 2.31 D) 2.35 Answer: B Explanation: A) B) D/E = Total Debt / Total Equity Total Debt = (notes payable (10.5) + current maturities of long-term debt (39.9) + long-term debt (239.7) = 290.1 million Total Equity = 10.2 × \$16 = 163.2, so D/E = 290.1 / 163.2 = 1.78 C) D) Diff: 2 Topic: 2.2 The Balance Sheet Skill: Analytical

10) If in 2006 Luther has 10.2 million shares outstanding and these shares are trading at \$16 per share, then what is Luther's Enterprise Value? A) -\$63.3 million B) \$353.1 million C) \$389.7 million D) \$516.9 million Answer: C Explanation: A) B) C) Enterprise value = MVE + Debt - Cash = 10.2 × \$16 + 290.1 - 63.6 = 389.7 D) Diff: 2 Topic: 2.2 The Balance Sheet Skill: Analytical 11) Luther's current ratio for 2006 is closest to: A) 0.84 B) 0.87 C) 1.15 D) 1.19 Answer: D **Explanation**: A) B) C) D) current ratio = current assets / current liabilities = 171 / 144 = 1.19 Diff: 2 Topic: 2.2 The Balance Sheet Skill: Analytical 12) Luther's quick ratio for 2005 is closest to: A) 0.77 B) 1.31 C) 1.09 D) 0.92 Answer: A Explanation: A) quick ratio = (current assets - inventory) / current liabilities quick ratio = (144.0 - 42.9) / 132 = 0.77 B) C) D) Diff: 2 Topic: 2.2 The Balance Sheet Skill: Analytical

13) The change in Luther's quick ratio from 2005 to 2006 is closest to:

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A) a decrease of .10

B) an increase of .10

C) a decrease of .15

D) an increase of .15

Answer: B

Explanation: A)

B) quick ratio in 2006 = (171.0 - 45.9)/144 = .87

quick rat io 2005 = (144.0 - 42.9) / 132 = .77

so the quick ratio increased by .87 - .77 = .10

C)

D)

Diff: 3

Topic: 2.2 The Balance Sheet

Skill: Analytical
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14) If on December 31, 2005 Luther has 8 million shares outstanding trading at \$15 per share., then what is Luther's market-to-book ratio?

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Answer: market-to-book = market value of equity / book value of equity
market-to-book = 8 million × $15 / $63.6 = 1.89
Diff: 2
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Topic: 2.2 The Balance Sheet Skill: Analytical

15) If on December 31, 2005 Luther has 8 million shares outstanding trading at \$15 per share., then what is Luther's enterprise value?

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Answer: Enterprise value = Market value of equity + Debt - Cash
market value of equity = 8 million \times $15 = $120 million
Debt = notes payable + current maturities of long-term debt + long-term debt
Debt = 9.6 + 36.9 + 168.9 = 215.4
Cash = 58.5
So, enterprise value = $120 + 215.4 - 58.5 = $276.90
Diff: 2
Topic: 2.2 The Balance Sheet
Skill: Analytical
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# 2.3 The Income Statement

1) Which of the following statements regarding the income statement is incorrect?

- A) The income statement shows the earnings and expenses at a given point in time.
- B) The income statement shows the flow of earnings and expenses generated by the firm between two dates.
- C) The last or "bottom" line of the income statement shows the firm's net income.
- D) The first line of an income statement lists the revenues from the sales of products or services. Answer: A

Explanation:

B) C) D) Diff: 2 Topic: 2.3 The Income Statement Skill: Conceptual

A)

2) Gross profit is calculated as

- A) Total sales cost of sales selling, general and administrative expenses depreciation and amortization
- B) Total sales cost of sales selling, general and administrative expenses
- C) Total sales cost of sales
- D) None of the above

Answer: C

- Explanation: A)
  - B)
  - C)
  - D)

Diff: 2

Topic: 2.3 The Income Statement Skill: Conceptual

3) Which of the following is not an operating expense?

A) Interest expense

- B) Depreciation and amortization
- C) Selling, general and administrative expenses
- D) Research and development

Answer: A

- Explanation: A)
  - B)
  - C) D)

Diff: 2

Topic: 2.3 The Income Statement Skill: Conceptual

## Consider the following income statement and other information:

Luther Corporation		
Consolidated Income State	ment	
Year ended December 31 (in \$	millions)	
	2006	2005
Total sales	610.1	578.3
Cost of sales	(500.2)	(481.9)
Gross profit	109.9	96.4
Selling, general, and		
administrative expenses	(40.5)	(39.0)
Research and development	(24.6)	(22.8)
Depreciation and amortization	(3.6)	(3.3)
Operating income	41.2	31.3
Other income		
Earnings before interest and taxes (EBIT)	41.2	31.3
Interest income (expense)	(25.1)	(15.8)
Pretax income	16.1	15.5
Taxes	(5.5)	(5.3)
Net income	10.6	10.2
Price per share	\$16	\$15
Shares outstanding (millions)	10.2	8.0
Stock options outstanding (millions)	0.3	0.2
Stockholders' Equity	126.6	63.6
Total Liabilities and Stockholders' Equity	533.1	386.7

4) For the year ending December 31, 2006 Luther's earnings per share are closest to:

A) \$1.01 B) \$1.04 C) \$1.58 D) \$4.04 Answer: B Explanation: A) B) EPS = Net Income / Shares Outstanding = \$10.6 / 10.2 = \$1.04 C) D) Diff: 1

Topic: 2.3 The Income Statement Skill: Analytical 5) Assuming that Luther has no convertible bonds outstanding, then for the year ending December 31, 2006 Luther's diluted earnings per share are closest to:

Luther's diluted earnings per share are closest to: A) \$1.01 B) \$1.04 C) \$1.53 D) \$3.92 Answer: A Explanation: A) Diluted EPS = Net Income / (shares outstanding + options contracts outstanding + shares possible from convertible bonds outstanding) = 10.6 / (10.2 + 0.3 + 0.0) = \$1.01B) C) D) Diff: 2 Topic: 2.3 The Income Statement Skill: Analytical 6) Luther's Operating Margin for the year ending December 31, 2005 is closest to: A) 1.8% B) 2.7% C) 5.4% D) 16.7% Answer: C Explanation: A) B) C) Operating Margin = Operating Income / Sales OM = 31.3 / 578.3 = .054 or 5.4% D) Diff: 1 Topic: 2.3 The Income Statement Skill: Analytical 7) Luther's Net Profit Margin for the year ending December 31, 2005 is closest to: A) 1.8% B) 2.7% C) 5.4% D) 16.7% Answer: A Explanation: A) Net Profit Margin = Net Income / Total Sales = 10.2 / 578.3 = .018 or 1.8% B) C) D) Diff: 1 Topic: 2.3 The Income Statement Skill: Analytical

8) Luther's earnings before interest, taxes, depreciation, and amortization (EBITDA) for the year ending December 31, 2006 is closest to:

A) 19.7 million B) 37.6 million C) 41.2 million D) 44.8 million Answer: D Explanation: A) B) C) D) EBITDA = EBIT + Depreciation & Amortization = 41.2 + 3.6 = \$44.8 million Diff: 1 Topic: 2.3 The Income Statement Skill: Analytical 9) Luther's return on equity (ROE) for the year ending December 31, 2006 is closest to: A) 2.0% B) 6.5% C) 8.4% D) 12.7% Answer: C Explanation: A) B) C) ROE = Net income / shareholders' equity = 10.6 / 126.6 = .084 or 8.4% D) Diff: 2 Topic: 2.3 The Income Statement Skill: Analytical 10) Luther's return on assets (ROA) for the year ending December 31, 2006 is closest to: A) 2.0% B) 6.5% C) 8.4% D) 12.7% Answer: A A) ROA = Net income / total assets. Explanation: This is a little tricky in that total assets aren't given in the problem. The student must remember the basic balance sheet equation A = L + SE. Total Liabilities and Shareholders' Equity is given and this is the same as total assets. So ROA = 10.6 / 533.1 = .020 or 2.0%B) C) D) Diff: 3 Topic: 2.3 The Income Statement Skill: Analytical

11) Luther's price - earnings ration (P/E) for the year ending December 31, 2006 is closest to: A) 7.9

A) 7.9 B) 10.1 C) 15.4 D) 16.0 Answer: C Explanation: A) B) C) P/E = Price / EPS or Market Cap / Earnings =  $(10.2 \times \$16) / \$10.6 = 15.4$ D) Diff: 3 Topic: 2.3 The Income Statement Skill: Analytical

12) Calculate Luther's return of equity (ROE), return of assets (ROA), and price-to-earnings ratio (P/E) for the year ending December 31, 2005.

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Answer: ROE = NI / shareholder equity = 10.2 / 63.6 = .160 or 16.0%

ROA = NI/ total assets

Here total assets are not given, but we know that Total Assets = Total Liabilities + Shareholder Equity,

so ROA = 10.2 / 386.7 = .026 or 2.6%

P/E = price / EPS or Market Cap / NI = (8.0 × $15) / $10.2 = 11.8

Diff: 2
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Topic: 2.3 The Income Statement Skill: Analytical

13) If Luther's accounts receivable were \$55.5 million in 2006, then calculate Luther's accounts receivable days for 2006.

Answer: Accounts receivable days =  $\frac{\text{accounts receivable}}{\text{sales/365}}$  =  $\frac{55.5}{610.1/365}$  = 33.2 days Diff: 2

Topic: 2.3 The Income Statement Skill: Analytical

#### 2.4 The Statement of Cash Flows

1) Which of the following is not a section on the cash flow statement?

- A) Income generating activities
- B) Investing activities
- C) Operating activities
- D) Financing activities

Answer: A

Explanation: A)

- B) C)
- D)

Diff: 1 Topic: 2.4 The Statement of Cash Flows Skill: Conceptual 2) Which of the following statements regarding net income transferred to retained earnings is correct?

- A) Net income = net income transferred to retained earnings dividends
- B) Net income transferred to retain earnings = net income + dividends
- C) Net income = net income transferred to retain earnings + dividends
- D) Net income transferred to retain earnings net income = dividends

Answer: C

Diff: 2

- Explanation: A)
  - B)
  - C)

D)

Topic: 2.4 The Statement of Cash Flows Skill: Conceptual

3) Which of the following is not a reason why cash flow may not equal net income?

- A) Amortization is added in when calculating net income.
- B) Changes in inventory will change cash flows but not income.
- C) Capital expenditures are not recorded on the income statement.
- D) Depreciation is deducted when calculating net income.

Answer: A

Explanation:	A)
	B)
	-

C) D)

Diff: 1 Topic: 2.4 The Statement of Cash Flows Skill: Conceptual

- 4) Which of the following adjustments to net income is not correct if you are trying to calculate cash flow from operating activities?
  - A) Add increases in accounts payable
  - B) Add back depreciation
  - C) Add increases in accounts receivable
  - D) Deduct increases in inventory

Answer: C

Explanation: A)

- B) C)
  - C) D)

Diff: 2 Topic: 2.4 The Statement of Cash Flows Skill: Conceptual 5) Which of the following adjustments is not correct if you are trying to calculate cash flow from financing activities?

A) Add dividends paid

B) Add any increase in long term borrowing

- C) Add any increase in short-term borrowing
- D) Add proceeds from the sale of stock

Answer: A

Explanation: A)

- B)
- C) D)
- Diff: 2

Topic: 2.4 The Statement of Cash Flows Skill: Conceptual

*Use the tables for the question(s) below.* 

Consider the following financial information:

		Luther Co	orporation		
	Con	solidated	Balance Sheet		
De	cember 3	1, 2006 ar	nd 2005 (in \$ millions)		
			Liabilities and Stockholders'		
Assets	2006	2005	Equity	2006	2005
Current Assets			Current Liabilities		
Cash	63.6	58.5	Accounts payable	87.6	73.5
			Notes payable /		
Accounts receivable	55.5	39.6	short-term debt	10.5	9.6
			Current maturities of long-		
Inventories	45.9	42.9	term debt	39.9	36.9
Other current assets	6.0	3.0	Other current liabilities	6.0	12.0
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Buildings	109.5	91.5	Capital lease obligationsS		
Equipment	119.1	99.6	Total Debt	239.7	168.9
Less accumulated					
depreciation	(56.1)	(52.5)	Deferred taxes	22.8	22.2
Net property, plant, and					
equipment	239.1	200.7	Other long-term liabilities		
Goodwill	60.0		Total long-term liabilities	262.5	
Other long-term assets	63.0	42.0	Total liabilities	406.5	323.1
Total long-term assets	362.1	242.7	Stockholders' Equity	126.6	63.6
			Total liabilities and		
Total Assets	533.1	386.7	Stockholders' Equity	533.1	386.7

#### Luther Corporation Consolidated Income Statement Year ended December 31 (in \$ millions) 2006

	2006	2005
Total sales	610.1	578.3
Cost of sales	(500.2)	(481.9)
Gross profit	109.9	96.4
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administrative expenses	(40.5)	(39.0)
Research and development	(24.6)	(22.8)
Depreciation and amortization	(3.6)	(3.3)
Operating income	41.2	31.3
Other income		
Earnings before interest and taxes (EBIT)	41.2	31.3
Interest income (expense)	(25.1)	(15.8)
Pretax income	16.1	15.5
Taxes	(5.5)	(5.3)
Net income	10.6	10.2
Dividends Paid	5.1	5.0
Price per Share	\$16	\$15
Shares outstanding (millions)	10.2	8.0
Stock options outstanding (millions)	0.3	0.2
Stockholders' Equity	126.6	63.6
Total Liabilities and Stockholders' Equity	533.1	386.7

6) For the year ending December 31, 2006 Luther's cash flow from operating activities is ? Answer: Operating cash flow = NI + Depreciation - chg in AR + chg in AP - chg in INV Operating cash flow = 10.6 + 3.6 - (55.5 - 39.6) + (87.6 - 73.5) - (45.9 - 42.9) = 9.4

Diff: 3

Topic: 2.4 The Statement of Cash Flows Skill: Analytical 7) For the year ending December 31, 2006 Luther's cash flow from financing activities is? Answer: Cash flow from financing: - dividends paid (5.1)57.5\* + sale or (purchase) of stock + increase in ST borrowing 3.9 + increase in LT borrowing 70.8 Cash flow from financing 127.1 NI transferred to RE(2006) = NI - Dividends paid = 10.6 - 5.1 = 5.6 sale of stock = Equity(2006) - NI transferred to RE(2006) - Equity(2005) = 126.6 - 5.5 - 63.6 = 57.5 increase in ST borrowing = chg in notes payable + chg in current portion of LT debt = (10.5 - 9.6) + (39.9 - 36.9) = 3.9increase in LT borrowing = 239.7 - 168.9 = 70.8 Diff: 3 Topic: 2.4 The Statement of Cash Flows

Skill: Analytical

# 2.5 Other Financial Statement Information

1) In addition to the balance sheet, income statement, and the statement of cash flows, a firm's complete financial statements will include all of the following except:

- A) Management discussion and Analysis
- B) Notes to the financial statements
- C) Securities and Exchange Commission's (SEC) commentary
- D) Statement of stockholders' equity

Answer: C

Explanation:	A)
	B)
	C)
	D)
D:(( 1	

Diff: 1 Topic: 2.5 Other Financial Statement Information Skill: Conceptual

2) Off-balance sheet transactions are required to be disclosed

A) in the management discussion and analysis.

B) in the auditor's report.

C) in the Securities and Exchange Commission's commentary.

D) in the statement of stockholders' equity.

Answer: A

Explanation: A) B) C) D) Diff: 2 Topic: 2.5 Other Financial Statement Information

Skill: Conceptual

3) Details of acquisitions, spin-offs, leases, taxes, and risk management activities are given

A) in the management discussion and analysis.

B) in the Securities and Exchange Commission's commentary.

C) in the auditor's report.

D) in the notes to the financial statements.

Answer: D

Explanation: A)

- B)
- C)
- D)

Diff: 2

Topic: 2.5 Other Financial Statement Information Skill: Conceptual

# 2.6 Accounting Manipulation

1) In response to corporate scandals such as Enron and WorldCom, in 2002 congress passed a law that requires, among other things, that CEOs and CFOs certify the accuracy and appropriateness of their firm's financial statements and increases he penalties against them if the financial statements later prove to be fraudulent. The name of this act is?

The name of this act is?

A) The Glass-Steagall Act

B) The Sarbanes-Oxley Act

C) The Accuracy in Accounting Act

D) The McCain-Feingold Act

Answer: B

Explanation: A) B) C) D) Diff: 1 Topic: 2.6 Accounting Manipulation

Skill: Definition