Chapter 5– Financial Accounting, 3rd Edition by Dyckman, Magee & Pfeiffer

Solutions to Practice Quiz

Topic: Liquidity Ratios
LO: 4

1. Selected balance sheet and income statement information is presented for four companies within the same industry (in millions):

	Company 1	Company 2	Company 3	Company 4
Current assets	$1,892	$2,601	$3,987	$2,201
Current liabilities	$854	$2,887	$3,334	$1,453
Total liabilities	$3,891	$7,011	$6,533	$3,942
Total liabilities and stockholders' equity	$4,843	$13,460	$13,045	$6,566

Based on current ratio calculations for all companies, which company is more liquid?

a. Company 1
b. Company 2
c. Company 3
d. Company 4

Answer: A
Rationale:

Company	**Current ratio**
Company 1	$1,892 / $854 = 2.22
Company 2	$2,601 / $2,887 = 0.90
Company 3	$3,987 / $3,334 = 1.20
Company 4	$2,201 / $1,453 = 1.51

Topic: Compute RNOA
LO: 5

2. Use the following selected balance sheet and income statement information for James Company (below in $millions) to compute the return on net operating assets (RNOA) to the nearest hundredth of a percent.

Operating profit before tax	Average net operating Assets	Sales	Tax rate on operating profit
$41,343	$265,376	$740,116	37.8%

a. 35.86%
b. 37.80%
c. 9.69%
d. 15.58%

Answer: C

Rationale: Net operating profit after tax = $41,343 – ($41,343 x 37.8%) = $25,715
RNOA = $25,715 / $265,376 = 9.69%

Topic: Solvency Ratios
LO: 4

3. Selected balance sheet and income statement information is presented for four companies within the same industry (in millions):

	Company 1	Company 2	Company 3	Company 4
Current assets	$927	$2,601	$3,987	$2,201
Current liabilities	$854	$2,887	$3,334	$1,453
Total liabilities	$3,891	$7,011	$6,533	$3,942
Total liabilities and stockholders' equity	$4,843	$13,460	$13,045	$6,566

Based on your calculations of the liabilities to equity ratio for all companies, which company is more solvent?

a. Company 1
b. Company 2
c. Company 3
d. Company 4

Answer: C
Rationale:

Company	Liabilities-to-equity ratio
Company 1	$ 3,891 / ($4,843 - $ 3,891) = 4.09
Company 2	$7,011 / ($13,460 - $7,011) = 1.09
Company 3	$6,533 / ($13,045 – 6,533) = 1.00
Company 4	$3,942 / ($6,566 - $3,942) = 1.50

Topic: Times-Interest-Earned
LO: 4

4. Morgan Company has sales of $1 million, tax rate of 40%, net operating profit margin before interest and taxes of 6% and total interest charges of $10,000 per year. What is the Times-Interest-Earned ratio?

a. 4.0
b. 7.0
c. 3.0
d. 6.0

Answer: D
Rationale: ($1,000,000 x 6%) / $10,000 = 6.0

Topic: Common-Size Comparative Income Statement
LO: 1

5. Washington, Inc., reported the following amounts of net income (in thousands) from 2010 to 2012:

2012	**2011**	**2010**
$270	$180	$110

Based on this information, relative to the prior year, the percentage change in net income:

a. Was the same in both 2011 and 2012.
b. Was smaller in 2012 than in 2011.
c. Was larger in 2012 than in 2011.
d. Cannot be determined without knowing more information.

Answer: B
Rationale: 90/180 = 50% while 70/110 = 63.6%

Topic: Asset Turnover
LO: 3

6. A company has the following values: PM = 0.09; EBI = $2,732; Average total assets = $44,360. Asset turnover (AT) is:

a. 0.68
b. 0.06
c. 1.46
d. 16.24

Answer: A
Rationale: AT = ($2,732 / $44,360) / 0.09 = 0.68

Use the following information for Questions 7 – 9:

Below are data from the financial statements of Crystal Company (in $millions).

Income statement data for 2010:	
Net income	$ 390
Net sales	1,530
Operating expenses	440
Cost of goods sold	520
Balance sheet data:	
Total equity, Dec. 31, 2009	$ 3,150
Total equity, Dec. 31, 2010	3,650
Operating assets, Dec. 31, 2009	2,760
Operating assets, Dec. 31, 2010	2,240
Operating liabilities, Dec. 31, 2009	1,100
Operating liabilities, Dec. 31, 2010	1,300
Tax Rate	40%

Topic: Operating Income
LO: 5
7. What was Crystal's operating income?
a. $1,010
b. $ 390
c. $ 570
d. $1,090
Answer: C
Rationale: $1,530 – $520 – $440 = $570

Topic: Return on Equity
LO: 2
8. What is Crystal's return on equity?
a. 16.8%
b. 25.5%
c. 37.3%
d. 11.5%
Answer: D
Rationale: Average Total Equity = ($3,150 + $3,650) ÷ 2 = $3,400
$390/$3,400 = 11.5%

Topic: Return on Net Operating Assets
LO: 5
9. What is Crystal's return on net operating assets?
a. 13.7%
b. 26.3%
c. 43.8%
d. 22.8%
Answer: B
Rationale:

$$\frac{\text{Net operating profit after taxes}}{\text{Average net operating assets}} = \text{Return on net operating assets (RNOA)}$$

Net operating profit after taxes = $570 – ($570 x 40%) = $342
Net operating assets (NOA) = Operating assets - Operating liabilities
2009 NOA = $2,760 – 1,100 = $1,660
2010 NOA = $2,240 – 1,300 = $940
($1,660 + 940) ÷ 2 = $1,300 Average net operating assets
$342/$1,300 = 26.3%

Topic: ROE Computation
LO: 2
10. Barton Company's 2010 balance sheet shows average shareholders' equity of $4,435 million, net operating profit after tax of $1,378 million, net income of $1,015 million, and common shares issued of $897 million. The company has no preferred shares issued. Barton's return on common equity for the year is:
a. 22.9%
b. 31.1%
c. 437%
d. 20.2%
Answer: A
Rationale: ROE = Net income/Average shareholders' equity = $1,015 million/$4,435 million = 22.9%