Chapter 3- Homework Questions and Problems Answers

35. Below is information for Smolira Golf, Inc. Use this information to work the problem.

SMOLIRA GOLF, INC.
Balance Sheets as of December 31, 2015 and 2016

	2015	2016		2015	2016
Assets			**Liabilities and Owners' Equity**		
Current assets			Current liabilities		
Cash	$ 4,607	$ 4,910	Accounts payable	$ 3,413	$ 3,846
Accounts receivable	6,702	8,149	Notes payable	2,768	3,416
Inventory	17,357	19,350	Other	138	165
Total	$28,666	$ 32,409	Total	$ 6,319	$ 7,427
			Long-term debt	$22,500	$ 19,000
			Owners' equity		
			Common stock and paid-in surplus	$38,000	$ 38,000
Fixed assets			Accumulated retained earnings	20,535	44,792
Net plant and equipment	58,688	76,810	Total	$58,535	$ 82,792
Total assets	$87,354	$109,219	Total liabilities and owners' equity	$87,354	$109,219

SMOLIRA GOLF, INC.
2016 Income Statement

Sales		$205,227
Cost of goods sold		138,383
Depreciation		5,910
EBIT		$ 60,934
Interest paid		1,617
Taxable income		$ 59,317
Taxes		20,760
Net income		$ 38,557
Dividends	$14,300	
Additions to retained earnings	24,257	

Calculating Financial Ratios. Find the following financial ratios for Smolira Golf (use year-end figures rather than average values where appropriate):

Short-term solvency ratios
- *a.* Current ratio __________
- *b.* Quick ratio __________
- *c.* Cash ratio __________

Asset utilization ratios
- *d.* Total asset turnover __________
- *e.* Inventory turnover __________
- *f.* Receivables turnover __________

Long-term solvency ratios
- *g.* Total debt ratio __________
- *h.* Debt-equity ratio __________
- *i.* Equity multiplier __________
- *j.* Times interest earned ratio __________
- *k.* Cash coverage ratio __________

Profitability ratios
- *l.* Profit margin __________
- *m.* Return on assets __________
- *n.* Return on equity __________

Answer: Here, we need to calculate several ratios given the financial statements. The ratios are:

Short-term solvency ratios:

Current ratio = Current assets / Current liabilities

Current ratio_{2013} = \$28,666 / \$6,319
Current ratio_{2013} = 4.54 times

Current ratio_{2014} = \$32,409 / \$7,427
Current ratio_{2014} = 4.36 times

Quick ratio = (Current assets – Inventory) / Current liabilities

Quick ratio_{2013} = (\$28,666 – 17,357) / \$6,319
Quick ratio_{2013} = 1.79 times

Quick ratio_{2014} = (\$32,409 – 19,350) / \$7,427
Quick ratio_{2014} = 1.76 times

Cash ratio = Cash / Current liabilities

Cash ratio_{2013} = \$4,607 / \$6,319
Cash ratio_{2013} = .73 times

Cash ratio_{2014} = \$4,910 / \$7,427
Cash ratio_{2014} = .66 times

Asset utilization ratios:

Total asset turnover = Sales / Total assets
Total asset turnover = \$205,227 / \$109,219
Total asset turnover = 1.88 times

Inventory turnover = COGS / Inventory
Inventory turnover = \$138,383 / \$19,350
Inventory turnover = 7.15 times

Receivables turnover = Sales / Receivables
Receivables turnover = \$205,227 / \$8,149
Receivables turnover = 25.18 times

Long-term solvency ratios:

Total debt ratio = (Current liabilities + Long-term debt) / Total assets

Total debt ratio_{2013} = (\$6,319 + 22,500) / \$87,354

Total debt ratio$_{2013}$ = .33 times

Total debt ratio$_{2014}$ = (\$7,427 + 19,000) / \$109,219
Total debt ratio$_{2014}$ = .24 times

Debt-equity ratio = (Current liabilities + Long-term debt) / Total equity

Debt-equity ratio$_{2013}$ = (\$6,319 + 22,500) / \$58,535
Debt-equity ratio$_{2013}$ = .49 times

Debt-equity ratio$_{2014}$ = (\$7,427 + 19,000) / \$82,792
Debt-equity ratio$_{2014}$ = .32 times

Equity multiplier = 1 + D/E ratio

Equity multiplier$_{2013}$ = 1 + .49
Equity multiplier$_{2013}$ = 1.49 times

Equity multiplier$_{2014}$ = 1 + .32
Equity multiplier$_{2014}$ = 1.32 times

Times interest earned = EBIT / Interest
Times interest earned = \$60,934 / \$1,617
Times interest earned = 37.68 times

Cash coverage ratio = (EBIT + Depreciation) / Interest
Cash coverage ratio = (\$60,934 + 5,910) / \$1,617
Cash coverage ratio = 41.34 times

Profitability ratios:

Profit margin = Net income / Sales
Profit margin = \$38,557 / \$205,227
Profit margin = .1879, or 18.79%

Return on assets = Net income / Total assets
Return on assets = \$38,557 / \$109,219
Return on assets = .3530, or 35.30%

Return on equity = Net income / Total equity
Return on equity = \$38,557 / \$82,792
Return on equity = .4657, or 46.57%