

# Financial Statement Analysis Practice Problem

From textbook: Self Test Problem 3.3 and 3.4. Question and Problems (same for 11th and 12th editions): 1-2,4-8,17,26-27(use 2015(11th) or 2018(12th))

1. Andy and April's Shop of Cool and Weird Stuff has net income of \$150,980, a price-earnings ratio of 12.8, and earnings per share of \$0.87. How many shares of stock are outstanding?
2. A firm has a debt-equity ratio of 57 percent, a total asset turnover of 1.12, and a profit margin of 4.9 percent. The total equity is \$511,640. What is the amount of the net income?

Use the following Financial Statements for "Galaxy Interiors" to answer the following questions

Galaxy United, Inc.

2012 Income Statement

Net sales	\$614,100	<b>Galaxy United, Inc.</b>				
Less: Cost of goods sold	521,400	<b>2011 and 2012 Balance Sheets</b>				
Less: Depreciation	<u>11,200</u>	<b><u>2011</u></b>	<b><u>2012</u></b>	<b><u>2011</u></b>	<b><u>2012</u></b>	
Earnings before interest and taxes	81,500	<b>Cash</b>	<b>\$17,000</b>	<b>\$16,500</b>	<b>Accounts payable</b>	<b>\$128,600</b> <b>\$134,700</b>
Less: Interest paid	<u>10,100</u>	<b>Accounts rec.</b>	<b>54,100</b>	<b>56,700</b>	<b>Long-term debt</b>	<b>147,500</b> <b>135,500</b>
Taxable Income	\$71,400	<b>Inventory</b>	<b><u>189,400</u></b>	<b><u>186,700</u></b>	<b>Common stock*</b>	<b>125,000</b> <b>140,000</b>
Less: Taxes	<u>28,900</u>	<b>Sub-total</b>	<b>\$260,500</b>	<b>\$259,900</b>	<b>Retained earnings</b>	<b><u>120,700</u></b> <b><u>131,800</u></b>
Net income	<u>\$42,500</u>	<b>Net fixed assets</b>	<b><u>261,300</u></b>	<b><u>282,100</u></b>	<b>Total</b>	<b><u>\$521,800</u></b> <b><u>\$542,000</u></b>
		<b>Total</b>	<b><u>\$521,800</u></b>	<b><u>\$542,000</u></b>	<b>Total</b>	<b><u>\$521,800</u></b> <b><u>\$542,000</u></b>

\*The par value of the common stock is \$1 per share.

3. What is debt-equity ratio? (Use 2012 values)
4. What is the cash coverage ratio for 2012?
5. What is the return on equity? (Use 2012 values)
6. What is the quick ratio for 2012?
7. Create a common-size Income statement (vertical)
8. Create a common-size Balance sheet (horizontal)

## Answers to Textbook

11th edition:

- 1) Current Ratio=1.44 times Quick Ratio=0.58 times
- 2) NI=1,050,000 ROA=8.02% ROE=14.19%
- 4) Inventory Turnover=11.22 times Days' Sales in inventory=35.53 days
- 5) Debt-Equity=1.13 Equity multiplier=2.13
- 6) EPS=\$3.47 DPS=\$1.15 Book Value per share=\$31.18 Market to book= 2.05 P/E=18.44 P/S=2.11
- 7) ROE=14.73%
- 8) 0.62
- 17) 2014 and 2015 a)1.44 and 1.51 b) 0.63 and 0.67 c) 0.18 and 0.20 d) 6.66% and 7.46% e) 0.34 and 0.30 (1.34 and 1.30) f) 0.26 and 0.23 (Long term 0.12 and 0.10)
- 26 a)1.15 b)0.68 c) 0.42 d) 0.88 e) 8.93 f) 23.09 g) 0.38 h) 0.60 i) 1.60 j) 5.73 k) 7.99 l) 11.94% m) 10.53% n) 16.85%
- 27) Answer listed in 26.

12th edition:

- 1) Current Ratio=1.47 times Quick Ratio=0.63 times
- 2) NI=835,000 ROA=6.47% ROE=11.60%
- 4) Inventory Turnover=12.88 times Days' Sales in inventory=28.34 days
- 5) Debt-Equity=0.85 Equity multiplier=1.85
- 6) EPS=\$3.74 DPS=\$1.15 Book Value per share=\$32.94 Market to book= 1.97 P/E=17.40 P/S=1.48
- 7) ROE=16.27%
- 8) 0.40
- 17) 2017 and 2018 a)1.49 and 1.51 b) 0.64 and 0.68 c) 0.19 and 0.20 d) 6.81% and 7.31% e) 0.32 and 0.31 (1.32 and 1.31) f) 0.25 and 0.24 (Long term 0.12 and 0.11)
- 26 a)1.30 b)0.79 c) 0.45 d) 0.81 e) 8.43 f) 18.24 g) 0.36 h) 0.57 i) 1.57 j) 5.22 k) 7.47 l) 12.29% m) 9.91% n) 15.58%
- 27) Answer listed in 26.

### Answer to above problems

- 1) 173,540
- 2) \$44,084
- 3) 0.99
- 4) 9.18
- 5) 16.43 %
- 6) 0.54
- 7) CGS: 84.9% DEP:1.8% EBIT:13.3% Interest:1.6% Taxable Income:11.6% Taxes:4.7% NI:6.9%
- 8) Cash: -2.9% A/R: 4.8% Inventory: -1.4% CA: -0.2% NFA: 8.0% TA:3.9%  
A/P:4.7% LTD:-8.1% CS:12.0% RE:9.2% TLE:3.9%