

Capítulo 1 – Financial Statements and Accounting Concepts/Principles

E2.7.

	<i>Category</i>	<i>Financial Statement(s)</i>
<i>Cash</i>	<i>A</i>	<i>BS</i>
<i>Accounts payable</i>	<i>L</i>	<i>BS</i>
<i>Common stock</i>	<i>SE</i>	<i>BS</i>
<i>Depreciation expense</i>	<i>E</i>	<i>IS</i>
<i>Net sales</i>	<i>R</i>	<i>IS</i>
<i>Income tax expense</i>	<i>E</i>	<i>IS</i>
<i>Short-term investments</i>	<i>A</i>	<i>BS</i>
<i>Gain on sale of land</i>	<i>G</i>	<i>IS</i>
<i>Retained earnings</i>	<i>SE</i>	<i>BS</i>
<i>Dividends payable</i>	<i>L</i>	<i>BS</i>
<i>Accounts receivable</i>	<i>A</i>	<i>BS</i>
<i>Short-term debt</i>	<i>L</i>	<i>BS</i>

E2.10

Use the accounting equation to solve for the missing information:

Firm A:

$$A = L + PIC + (\text{Beg. RE} + \text{NI} - \text{DIV} = \text{End. RE})$$

$$\$? = \$80,000 + \$55,000 + (\$50,000 + 68,000 - \$12,000 = ?)$$

In this case, the ending balance of retained earnings must be determined first:

$$\$50,000 + \$68,000 - \$12,000 = \text{End. RE}$$

$$\text{Retained earnings, 12/31/16} = \$106,000$$

Once the ending balance of retained earnings is known, total assets can be determined:

$$A = \$80,000 + \$55,000 + \$106,000$$

$$\text{Total assets, 12/31/16} = \$241,000$$

Firm B:

$$A = L + \text{PIC} + (\text{Beg. RE} + \text{NI} - \text{DIV} = \text{End. RE})$$

$$\$435,000 = ? + \$59,000 + (\$124,000 + \$110,000 - ? = \$186,000)$$

$$\$435,000 = L + \$59,000 + \$186,000$$

$$\text{Total liabilities, 12/31/16} = \$190,000$$

$$\$124,000 + \$110,000 - \text{DIV} = \$186,000$$

$$\text{Dividends declared and paid during 2016} = \$48,000$$

Firm C:

$$A = L + \text{PIC} + (\text{Beg. RE} + \text{NI} - \text{DIV} = \text{End. RE})$$

$$\$155,000 = \$75,000 + \$45,000 + (? + \$25,000 - \$16,000 = ?)$$

In this case, the ending balance of retained earnings must be determined first:

$$\$155,000 = \$75,000 + \$45,000 + \text{End. RE}$$

$$\text{Retained earnings, 12/31/16} = \$35,000$$

Once the ending balance of retained earnings is known, the beginning balance of retained earnings can be determined:

$$\text{Beg. RE} + \$25,000 - \$16,000 = \$35,000$$

$$\text{Retained earnings, 1/1/16} = \$26,000$$

P2.16 The solution approach is similar to that shown in Problem 2-15. Gains or losses can be calculated for the sale (or collection) of each of Kimber Co.'s non-cash assets, as follows:

	<i>Cash received upon sale or collection of asset</i>	<i>Gain (loss) recorded and effect on Stockholders' Equity</i>
Accounts receivable . .	\$62,600 * 90% = \$ 56,340	\$62,600 * 10% = \$ (6,260)
Merchandise inventory . .	\$114,700 * 80% = (22,940)	91,760 \$114,700 * 20% =
Buildings & Equipment . .	BV [^] + \$40,000 = 40,000	188,000 Amount above BV =
Land	Appraised amount = <u>14,000</u>	<u>65,000</u> \$65,000 - \$51,000 =
Total cash received	<u>\$401,100</u>	Net gain <u>\$ 24,800</u>

[^] \$343,000 - \$195,000 accumulated depreciation = \$148,000 book value of buildings & equipment.

The \$401,100 cash received from the liquidation of non-cash assets would be added to the beginning cash balance of \$18,400, and \$419,500 is the amount of cash available to pay the claims of creditors and stockholders. Liabilities would be paid first (including the amounts that are *not* shown on the balance sheet), and the balance would be paid to the stockholders:

Total cash available	\$419,500
Accounts payable	\$46,700
Notes payable	58,500
Wages payable (not shown on balance sheet)	2,400
Interest payable (not shown on balance sheet)	5,100
Long-term debt	<u>64,800</u> <u>(177,500)</u>
Total cash available to stockholders	<u>\$242,000</u>

The total cash available to stockholders upon liquidation can be verified, as follows:

Total stockholders' equity (<i>unadjusted</i> , from balance sheet)	\$224,700
Add: Gain on sale of buildings & equipment	40,000
Add: Gain on sale of land	14,000
Less: Loss on collection of accounts receivable	(6,260)
Less: Loss on liquidation of merchandise inventory	(22,940)
Less: Unrecorded wages expense	(2,400)
Less: Unrecorded interest expense	<u>(5,100)</u>

Total stockholders' equity, <i>as adjusted</i>	<u>\$242,000</u>
A summary reconciliation is as follows:	
Total stockholders' equity (<i>unadjusted</i> , from balance sheet)	\$224,700
Add: Net gain from liquidation of all assets (<i>see calculations above</i>)....	24,800
Less: Unrecorded liabilities for wages and interest.....	<u>(7,500)</u>
Total stockholders' equity, <i>as adjusted</i>	<u>\$242,000</u>

E2.11.

Prepare the retained earnings portion of a statement of changes in stockholders' equity for the year ended December 31, 2016:

Retained Earnings, December 31, 2015.....	\$ 623,600
Less: Net loss for the year ended December 31, 2016.....	(9,400)
Less: Dividends declared and paid in 2016.....	<u>(37,000)</u>
Retained Earnings, December 31, 2016.....	<u>\$577,200</u>

- b. As shown in the schedule in part a), total stockholders' equity on the balance sheet had not been adjusted for the gains and losses from the sale (or collection) of the non-cash assets; nor was it adjusted for the effects of the expense/liability accruals for wages and interest.

P2.17.

a.	Accounts receivable	\$ 99,000
	Cash	27,000
	Supplies	18,000
	Merchandise inventory	<u>93,000</u>
	Total current assets	<u>\$237,000</u>
b.	Accounts payable	\$ 69,000
	Long-term debt	120,000
	Common stock	30,000
	Retained earnings	<u>177,000</u>
	Total liabilities and stockholders' equity	<u>\$396,000</u>
c.	Sales revenue	\$420,000
	Cost of goods sold	<u>(270,000)</u>
	Gross profit	\$150,000
	Service revenue	60,000
	Depreciation expense	(36,000)
	Supplies expense	<u>(42,000)</u>
	Earnings from operations (operating income)	<u>\$132,000</u>
d.	Earnings from operations (operating income)	\$132,000
	Interest expense	<u>(12,000)</u>
	Earnings before taxes	\$120,000
	Income tax expense	<u>(36,000)</u>
	Net income	<u>\$ 84,000</u>
e.	\$36,000 income tax expense / \$120,000 earnings before taxes = 30% average tax rate	

f.	Retained earnings, January 1, 2016	?
	Net income for the year	\$ 84,000
	Dividends declared and paid during the year	<u>(48,000)</u>
	Retained earnings, December 31, 2016	<u>\$177,000</u>

Solving the model, the beginning retained earnings balance must have been \$141,000, because the account balance increased by \$36,000 during the year to an ending balance of \$177,000.

. P2-19 BREANNA, INC.
a. Income Statement
For the Year Ended December 31, 2016

Sales	\$800,000
Cost of goods sold	<u>(512,000)</u>
Gross profit	\$288,000
Selling, general, and administrative expenses	<u>(136,000)</u>
Earnings from operations (operating income)	\$152,000
Interest expense	<u>(24,000)</u>
Earnings before taxes	\$128,000
Income tax expense	<u>(32,000)</u>
Net income	<u>\$ 96,000</u>

BREANNA, INC.
Statement of Changes in Stockholders' Equity
For the Year Ended December 31, 2016

Paid-in capital:	
Common stock	\$360,000
Retained earnings:	
Beginning balance	\$ 92,000
Net income for the year	96,000
Less: Dividends declared and paid during the year	<u>(48,000)</u>
Ending balance	<u>140,000</u>
Total stockholders' equity	<u>\$500,000</u>

BREANNA, INC.
Balance Sheet
December 31, 2016

Assets:	
Cash	\$260,000
Accounts receivable	40,000
Merchandise inventory	<u>148,000</u>
Total current assets	\$448,000

Equipment	480,000	
Less: Accumulated depreciation	<u>(208,000)</u>	<u>272,000</u>
Total assets		<u>\$720,000</u>
Liabilities:		
Accounts payable	\$ 60,000	
Long-term debt	<u>160,000</u>	
Total liabilities		\$220,000
Stockholders' Equity:		
Common stock	\$360,000	
Retained earnings	<u>140,000</u>	
Total stockholders' equity		<u>\$500,000</u>
Total liabilities and stockholders' equity		<u>\$720,000</u>

P2.19. (continued)

b. $\$32,000$ income tax expense / $\$128,000$ earnings before taxes = 25% average tax rate.

c. $\$24,000$ interest expense / $\$160,000$ long-term debt = 15% interest rate. This assumes that the year-end balance of long-term debt is representative of the *average* long-term debt account balance throughout the year.

$\$360,000$ common stock / 36,000 shares = \$10 per share par value.

d.

$\$48,000$ dividends declared and paid / $\$96,000$ net income = 50%. This assumes that the board of directors has a policy to pay dividends in proportion to earnings.

e.

P2.25

For the years ended November 30 and 24, respectively:	2014	2013
Net revenues.....	\$4,753,992	\$4,681,691
Cost of goods sold.....	<u>2,405,552</u>	<u>2,331,219</u>
Gross profit.....	2,348,440	2,350,472
Selling, general and administrative expenses.....	<u>2,034,589*</u>	<u>1,884,965</u>
Operating income	313,851	465,507
Interest expense and other expenses, net.....	<u>159,997</u>	<u>142,894</u>
Income before income taxes.....	153,854	322,613
Income tax expense.....	<u>49,545</u>	<u>94,477</u>
Net income.....	<u>\$ 104,309</u>	<u>\$ 228,136</u>

* Includes \$128,425 of net restructuring charges, so 2014 selling, general and administrative expenses exclusive of these charges = \$1,906,164 (\$2,034,589 - \$128,425). This is the amount most directly comparable to the S,G&A expenses shown for 2013 of \$1,884,965.

As at November 30 and 24, respectively:

Total assets.....	\$2,924,073	\$3,127,418
Total liabilities.....	2,691,954	2,913,918
Total stockholders' equity.....	232,119	213,500

a.

	2014	2013
Net sales	\$182,795	\$170,910
Cost of sales	<u>(112,258)</u>	<u>(106,606)</u>
Gross profit	<u>\$ 70,537</u>	<u>\$ 64,304</u>
Gross profit/net sales	38.6%	37.6%

Apple was able to achieve amazingly high sales growth rates for more than a decade since the introduction of the iPod in 2001, and in subsequent years with the introduction of the iPhone in 2007 and iPad in 2010. The company has now grown to a size and scale of operations where it has become difficult to maintain high sales growth rates on a percentage basis, although in absolute terms the nearly \$12 billion increase in net sales from 2013 to 2014 is still a remarkable achievement.

Although the 1% increase in the gross profit/net sales ratio during the year ended September 27, 2014 was not terribly significant, it does represent a move in the right direction for the company. For your reference, here is Apple's 5-year trend for these data:

	2014	2013	2012	2011	2010
Net sales	\$182,795	\$170,910	\$156,508	\$108,249	\$65,225
Cost of sales	<u>(112,258)</u>	<u>(106,606)</u>	<u>(87,846)</u>	<u>(64,431)</u>	<u>(39,541)</u>
Gross profit	<u>\$ 70,537</u>	<u>\$ 64,304</u>	<u>\$ 68,662</u>	<u>\$ 43,818</u>	<u>\$25,684</u>
Gross profit/net sales	38.6%	37.6%	43.9%	40.5%	39.4%

	2014	2013
Gross profit (from part <i>a</i> above)	\$70,537	\$64,304
Research and development expenses	6,041	4,475
Selling, general, and administrative expenses	<u>11,993</u>	<u>10,830</u>
Operating income	<u>\$52,503</u>	<u>\$48,999</u>
Operating income/net sales	28.7%	28.7%

b.

There was no change in operating income as a percentage of net sales during the fiscal year ended on September 27, 2014, which reflects well on Apple's consistency of operations and predictability of earnings.

2014	2013
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c.	Operating income (from part <i>b</i> above)	\$70,537	\$64,304
	Other income, net	<u>980</u>	<u>1,156</u>
	Income before taxes	\$53,483	\$50,155
	Provision for income taxes	<u>(13,973)</u>	<u>(13,118)</u>
	Net income	<u>\$39,510</u>	<u>\$37,037</u>

Solution approach: The “Income before taxes” line has been added to emphasize the importance of understanding the difference between operating and non-operating items on the income statement. The problem could be solved without calculating this number.