CONT 3106
SOLUTIONS FOR PROBLEMS AND EXERCISES OF CHAPTERS 11, 12 & 4
SECOND SEMESTER 2012-2013

CHAPTER 11

Problem 11-1C

Type of Activity	Cash Inflow or Outflow	Transaction
F	CI	1. Issuance of common stock
F	CI	2. Issuance of bonds
I	CO	3. Investment in bonds
I	CI	4. Collection of a note receivable
O	CI	5. Sale of inventory
F	CO	6. Repayment of note payable
F	CO	7. Payment of a cash dividend
I	CO	8. Purchase of land for cash
F	CI	9. Reissue of treasury stock
O	CI	10. Collection of an account receivable
F	CI	11. Issuance of a note payable
O	CO	12. Payment of employee salaries
I	NE	13. Sale of equipment for a note receivable
O	CO	14. Payment of interest on bonds payable
I	CI	15. Sale of a building

Problem 11-2C

Alpha Technologies **Statement of Cash Flows** **For the Year Ended December 31, 2012**		
Cash Flows from Operating Activities		
Net income	$ 80,000	
Adjustments for noncash effects:		
Depreciation expense	20,000	
Loss on sale of land	7,000	
Increase in accounts receivable	(60,000)	
Increase in inventory	(30,000)	
Increase in prepaid rent	(10,000)	
Increase in accounts payable	10,000	
Net cash flows from operating activities		$ 17,000
Cash Flows from Investing Activities		
Cash received from sale of land	3,000	
Purchase of equipment	(220,000)	
Net cash flows from investing activities		(217,000)
Cash Flows from Financing Activities		
Issuance of common stock	250,000	
Payment of dividends	(40,000)	
Repayment of notes payable	(50,000)	
Net cash flows from financing activities		160,000
Net increase (decrease) in cash		(40,000)
Cash at the beginning of the period		80,000
Cash at the end of the period		$ 40,000

Problem 11-4C

Communication Accessories
Statement of Cash Flows
For the Year Ended December 31, 2012

Cash Flows from Operating Activities		
Net income	$212,000	
Adjustments for noncash effects:		
Depreciation expense	38,000	
Gain on sale of land	(4,000)	
Decrease in accounts receivable	12,000	
Decrease in inventory	17,000	
Increase in prepaid rent	(2,000)	
Decrease in accounts payable	(18,000)	
Decrease in interest payable	(1,000)	
Increase in income tax payable	2,000	
Net cash flows from operating activities		$256,000
Cash Flows from Investing Activities		
Purchase investment in stock	(95,000)	
Sale of land	34,000	
Net cash flows from investing activities		(61,000)
Cash Flows from Financing Activities		
Payment of cash dividends	(200,000)	
Net cash flows from financing activities		(200,000)
Net increase (decrease) in cash		(5,000)
Cash at the beginning of the period		187,000
Cash at the end of the period		$182,000
Note: Noncash Activities		
Purchase equipment issuing a note payable		$80,000

Problem 11-7C

Communication Accessories
Statement of Cash Flows
For the Year Ended December 31, 2012

Cash Flows from Operating Activities		
Cash received from customers	$2,812,000	
Cash paid to suppliers	(1,901,000)	
Cash paid for operating expenses	(577,000)	
Cash paid for interest	(17,000)	
Cash paid for income taxes	(61,000)	
Net cash flows from operating activities		$256,000
Cash Flows from Investing Activities		
Purchase investment in stock	(95,000)	
Sale of land	34,000	
Net cash flows from investing activities		(61,000)
Cash Flows from Financing Activities		
Payment of cash dividends	(200,000)	
Net cash flows from financing activities		(200,000)
Net increase (decrease) in cash		(5,000)
Cash at the beginning of the period		187,000
Cash at the end of the period		$182,000
Note: Noncash Activities		
Purchase equipment issuing a note payable		$80,000

Revenues	$2,800,000
+ Decrease in accounts receivable	12,000
= Cash received from customers	$2,812,000

Cost of goods sold	$1,900,000
− Decrease in inventory	(17,000)
= Purchases	1,883,000
+ Decrease in accounts payable	18,000
= Cash paid to suppliers	$1,901,000

Operating expenses	$575,000
+ Increase in prepaid rent	2,000
= Cash paid for operating expenses	$577,000

Interest expense	$16,000
+ Decrease in interest payable	1,000
= Cash paid for interest	$17,000

Income tax expense	$63,000
− Increase in income tax payable	(2,000)
= Cash paid for income taxes	$61,000

CHAPTER 12

Problem 12-1C

Requirement 1

The Sports Warehouse
Income Statements
For the Year Ended December 31, 2012

	Equipment		Apparel	
	Amount	**%**	**Amount**	**%**
Sales	$1,700,000	**100.0**	$2,850,000	**100.0**
Cost of goods sold	1,100,000	**65.7**	1,400,000	**49.1**
Gross profit	600,000	**35.3**	1,450,000	**50.9**
Operating expenses	250,000	**14.7**	500,000	**17.6**
Operating income	350,000	**20.6**	950,000	**33.3**
Other income (expense)	25,000	**1.5**	(60,000)	**(2.1)**
Income before tax	375,000	**22.1**	890,000	**31.2**
Income tax expense	90,000	**5.3**	280,000	**9.8**
Net income	$ 285,000	**16.8**	$ 610,000	**21.4**

Requirement 2

The apparel segment is more profitable. Net income is 21.4% of sales in that segment compared to only 16.8% of sales in the equipment segment. If these results continue, the company may want to place greater focus on the expansion of the more profitable apparel segment.

Problem 12-2C

Requirement 1

The Sports Warehouse
Income Statements
For the Years Ended December 31

			Increase (Decrease)	
	2013	**2012**	**Amount**	**%**
Sales	$ 4,700,000	$ 4,550,000	**$ 150,000**	**3.3**
Cost of goods sold	2,600,000	2,500,000	**100,000**	**4.0**
Gross profit	2,100,000	2,050,000	**50,000**	**2.4**
Operating expenses	690,000	750,000	**(60,000)**	**(8.0)**
Operating income	1,410,000	1,300,000	**110,000**	**8.5**
Other income (expense)	(40,000)	(35,000)	**(5,000)**	**(14.3)**
Income before tax	1,370,000	1,265,000	**105,000**	**8.3**
Income tax expense	400,000	370,000	**30,000**	**8.1**
Net income	$ 970,000	$ 895,000	**$ 75,000**	**8.4**

Requirement 2

Sales and gross profit both increased about 3%. The company also managed to decrease operating expenses by 8%. This resulted in increases to operating income, income before tax, and net income around 8% as well.

Problem 12-3C

Requirement 1

The Sports Shack
Balance Sheet
December 31

Assets	**2012**		**2011**	
	Amount	**%**	**Amount**	**%**
Current assets:				
Cash	$ 218,000	**7.1**	$ 196,000	**6.8**
Accounts receivable	680,000	**22.0**	880,000	**30.4**
Inventory	1,250,000	**40.5**	1,100,000	**38.1**
Supplies	90,000	**2.9**	65,000	**2.3**
Long-term assets:				
Equipment	1,200,000	**38.9**	900,000	**31.1**
Accumulated depreciation	(350,000)	**(11.4)**	(250,000)	**(8.7)**
Total assets	$3,088,000	**100.0**	$2,891,000	**100.0**
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	$ 65,000	**2.1**	$ 55,000	**1.9**
Interest payable	4,000	**0.1**	6,000	**0.2**
Income tax payable	40,000	**1.3**	30,000	**1.1**
Long-term liabilities:				
Notes payable	400,000	**13.0**	300,000	**10.4**
Stockholders' equity:				
Common stock	900,000	**29.1**	900,000	**31.1**
Retained earnings	1,679,000	**54.4**	1,600,000	**55.3**
Total liabilities and equity	$3,088,000	**100.0**	$2,891,000	**100.0**

Requirement 2

The Sports Shack Balance Sheet December 31				
	Year		Increase (Decrease)	
Assets	**2012**	**2011**	**Amount**	**%**
Current assets:				
Cash	$ 218,000	$ 196,000	**22,000**	**11.2**
Accounts receivable	680,000	880,000	**(200,000)**	**(22.7)**
Inventory	1,250,000	1,100,000	**150,000**	**13.6**
Supplies	90,000	65,000	**25,000**	**38.5**
Long-term assets:				
Equipment	1,200,000	900,000	**300,000**	**33.3**
Accumulated depreciation	(350,000)	(250,000)	**(100,000)**	**(40.0)**
Total assets	$3,088,000	$2,891,000	**$197,000**	**6.8**
Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	$ 65,000	$ 55,000	**10,000**	**18.2**
Interest payable	4,000	6,000	**(2,000)**	**(33.3)**
Income tax payable	40,000	30,000	**10,000**	**33.3**
Long-term liabilities:				
Notes payable	400,000	300,000	**100,000**	**33.3**
Stockholders' equity:				
Common stock	900,000	900,000	**0**	**0**
Retained earnings	1,679,000	1,600,000	**79,000**	**4.9**
Total liabilities and equity	$3,088,000	$2,891,000	**$197,000**	**6.8**

Problem 12-4C

Risk Ratios	**Calculations**	
1. Receivable turnover ratio	$\frac{\$6,600,000}{(\$680,000 + \$880,000) / 2}$	**= 8.5 times**
2. Average collection period	$\frac{365}{8.5}$	**= 42.9 days**
3. Inventory turnover ratio	$\frac{\$4,700,000}{(\$1,250,000 + \$1,100,000) / 2}$	**= 4.0 times**
4. Average days in inventory	$\frac{365}{4.0}$	**= 91.3 days**

5. Current ratio	$\frac{\$2,238,000}{\$109,000}$	**= 20.5 to 1**
6. Acid-test ratio	$\frac{\$218,000 + \$680,000}{\$109,000}$	**= 8.2 to 1**
7. Debt to equity ratio	$\frac{\$509,000}{\$2,579,000}$	**= 19.7%**
8. Times interest earned ratio	$\frac{\$270,000 + \$50,000 + \$80,000}{\$50,000}$	**= 8.0 times**

Problem 12-5C

Profitability Ratios	**Calculations**	
1. Gross profit ratio	$\frac{\$1,900,000}{\$6,600,000}$	**= 28.8%**
2. Return on assets	$\frac{\$270,000}{(\$3,088,000 + \$2,891,000) / 2}$	**= 9.0%**
3. Profit margin	$\frac{\$270,000}{\$6,600,000}$	**= 4.1%**
4. Asset turnover	$\frac{\$6,600,000}{(\$3,088,000 + \$2,891,000) / 2}$	**= 2.2 times**
5. Return on equity	$\frac{\$270,000}{(\$2,579,000 + \$2,500,000) / 2}$	**= 10.6%**
6. Price-earnings ratio	$\frac{\$5.40}{\$0.30}$	**= 18.0 times**

CHAPTER 4

Exercise 4-1

1. False
2. True
3. True
4. False
5. True

6. True

Exercise 4-2

1. True
2. False
3. True
4. True
5. False
6. False

Exercise 4-3

1. True
2. False
3. False
4. True
5. True
6. False
7. True
8. True
9. False

Exercise 4-4

1. Performance reviews
2. Physical controls
3. Separation of duties
4. Reconciliations
5. None
6. Proper authorization