

Chapter 16

Statement of Cash Flows

Study Guide

Do You Know...?

Learning Objective 1: Describe the cash flow activities reported in the statement of cash flows.

- ☐ If a cash flow would be considered as an operating, financing, or investing activity?
(See exercises 1–3)

Learning Objective 2: Prepare a statement of cash flows, using the indirect method.

- ☐ If a change in an operating asset or liability would be a positive or negative adjustment to reconcile net income to net cash flow from operating activities? (See exercises 4–6)
- ☐ How to prepare a statement of cash flows using the indirect method?
(See exercises 7–9)

Learning Objective 3: Prepare a statement of cash flows, using the direct method.

- ☐ How to calculate cash received and cash paid for various expenses under the direct method? (See exercises 10–12)
- ☐ How to prepare a statement of cash flows using the direct method? (See exercises 13–15)

Learning Objective 4: Describe and illustrate the use of free cash flow in evaluating a company's cash flow.

- ☐ How to calculate and interpret a company's free cash flow? (See exercises 16–18)

Fill-in-the-Blank Equations

1. Sales + _____ OR – _____ = Cash received from customers
2. Cost of merchandise sold + Increase in inventories OR – _____ AND + _____
OR – _____ = Cash payments for merchandise
3. _____ + Decrease in accrued expenses payable – Increase in accrued expenses payable = _____
4. Interest expense + _____ – Increase in interest payable = Cash payments for interest
5. Income tax expense + Decrease in income tax payable – _____ = Cash payments for income taxes

6. Free cash flow = Net cash flow from operating activities – _____

Exercises

1. Determine if each activity would be shown as an operating, financing, or investing activity in the statement of cash flows.
 - a. Purchase of 5%, \$4,000,000 bonds
 - b. Sale of land for \$650,000
 - c. Payment of \$4,500 for advertising
2. Would each of the following activities be found in the operating, financing, or investing section of the statement of cash flows?
 - a. Payment of \$3,500 interest on bonds payable
 - b. Receipt of \$5,200 dividends from equity securities
 - c. Issuance of a \$5,000 note payable to bank for cash
3. Determine if each transaction would be shown in the operating, financing, or investing section of the statement of cash flows.
 - a. Payment for insurance for \$15,000 for the upcoming year
 - b. Issuance of 5,000 shares of common stock
 - c. Sale of old equipment for \$1,200
4. Using the following beginning and ending operating account balances, determine if each change would be a positive or negative adjustment to net income to arrive at net cash flows from operating activities under the indirect method.

	<u>Dec. 31</u>	<u>Jan. 1</u>
Accounts receivable	\$ 6,210	\$ 4,450
Merchandise inventory	9,900	10,880
Supplies	3,200	3,000
Accounts payable	10,100	7,800
Interest payable	1,600	3,200

5. Determine if each change in the operating accounts shown would be a positive or a negative adjustment to net income to arrive at net cash flows from operating activities using the indirect method.

	<u>Dec. 31</u>	<u>Jan. 1</u>
Accounts receivable	\$7,500	\$7,900
Merchandise inventory	7,750	7,500
Supplies	490	570
Accounts payable	4,850	5,000
Dividends payable	1,000	7,800

6. Use the beginning and ending account balances below to determine the dollar effect on net income when reconciling to arrive at net cash flows from operating activities under the indirect method.

	<u>Dec. 31</u>	<u>Jan. 1</u>
Accounts receivable	\$ 8,300	\$10,000
Merchandise inventory	9,100	6,750
Prepaid insurance	5,200	12,800
Accounts payable	8,250	7,800
Wages payable	12,190	14,600

7. Prepare the operating section of the statement of cash flows under the indirect method using the income statement below. During the year, accounts payable increased by \$1,200 and accounts receivable decreased by \$2,200.

ABC Corporation		
Income Statement		
For the Year Ended December 31, 20Y5		
Sales revenue		\$182,100
Cost of merchandise sold		<u>90,400</u>
Gross profit		\$ 91,700
Operating expenses:		
Salaries expense	\$41,300	
Advertising expense	1,500	
Depreciation expense	6,250	
Amortization expense	<u>2,240</u>	
Total operating expenses		<u>51,290</u>
Income from operations		\$ 40,410
Other revenue and expense:		
Rent revenue	\$15,300	
Gain on sale of equipment	<u>2,200</u>	<u>17,500</u>
Net income		<u>\$ 57,910</u>

8. Use the income statement below to prepare the statement of cash flows using the indirect method. During the year, the company also had a \$750 decrease in accounts payable, a \$200 increase in supplies, and a \$1,000 decrease in accounts receivable. The company issued \$4,000,000 of 10% bonds at face value and paid \$14,000 in dividends to shareholders. ABC Corporation received \$10,000 in cash for the investments sold. The cash balance at the beginning of the year was \$460,900.

ABC Corporation		
Income Statement		
For the Year Ended December 31, 20Y5		
Sales revenue		\$122,300
Cost of merchandise sold		<u>25,700</u>
Gross profit		\$ 96,600
Operating expenses:		
Salaries expense	\$35,000	
Insurance expense	4,800	
Depreciation expense	7,700	
Amortization expense	<u>1,200</u>	
Total operating expenses		<u>48,700</u>
Income from operations		\$ 47,900
Other revenue and expense:		
Rent revenue	\$10,000	
Loss on investments	<u>(2,200)</u>	<u>7,800</u>
Net income		<u>\$ 55,700</u>

9. Prepare the statement of cash flows using the income statement shown and the indirect method. The company also had a \$1,500 increase in accounts receivable, a \$2,200 decrease in accounts payable, and a \$4,200 decrease in merchandise inventory. The corporation paid \$50,000 in dividends and purchased land worth \$40,000, half of which was paid for using cash and a note payable for the remainder. The cash balance at the beginning of the year was \$22,000.

ABC Corporation		
Income Statement		
For the Year Ended December 31, 20Y5		
Sales revenue		\$98,100
Cost of merchandise sold		<u>10,850</u>
Gross profit		\$87,250
Operating expenses:		
Wages expense	\$12,000	
Insurance expense	6,600	
Depreciation expense	5,100	
Amortization expense	<u>3,100</u>	
Total operating expenses		<u>26,800</u>
Income from operations		\$60,450
Other revenue and expense:		
Interest revenue	\$ 1,350	
Interest expense	<u>(1,500)</u>	<u>(150)</u>
Net income		<u>\$60,300</u>

10. All American's sales for the 20Y5 fiscal year totaled \$92,000. The company's income statement included the following expenses: income tax expense, \$8,000; wages expense, \$40,000; and cost of merchandise sold, \$10,000. The balance sheet shows the following changes in account balances: increase in accounts receivable, \$4,000; increase in merchandise inventory, \$8,600; decrease in accounts payable, \$7,500; decrease in wages payable, \$4,000; and increase in income taxes payable, \$2,000. Calculate the following:
- Cash receipts from customers
 - Cash payments for merchandise
 - Cash payments for income taxes
 - Cash payments for wages

- 11.** Allen Ales' income statement for 20Y5 shows sales of \$97,000 and the following expenses: interest expense, \$2,000; utilities expense, \$9,500; income tax expense, \$7,700; and cost of merchandise sold, \$16,500. The balance sheet gives the following changes in account balances: decrease in accounts receivable, \$2,000; decrease in merchandise inventory, \$7,100; increase in accounts payable, \$3,000; decrease in utilities payable, \$1,300; and decrease in income taxes payable, \$4,000. Calculate the following:
- Cash receipts from customers
 - Cash payments for merchandise
 - Cash payments for utilities
 - Cash payments for income taxes
- 12.** For 20Y5, RPC Corporation's income statement shows sales of \$51,000 and the following expenses: legal expense, \$4,000; interest expense, \$1,500; income tax expense, \$7,500; cost of merchandise sold, \$10,900; and wages expense, \$6,800. The balance sheet shows the following changes in account balances: decrease in accounts receivable, \$1,950; increase in legal expenses payable, \$3,100; decrease in wages payable, \$4,100; increase in accounts payable, \$5,500; decrease in merchandise inventory, \$3,300; and increase in income taxes payable, \$1,100. Calculate the following:
- Cash receipts from customers
 - Cash payments for merchandise
 - Cash payments for wages
 - Cash payments for income taxes
 - Cash payments for legal expenses
- 13.** Use the information below to prepare the operating section of the statement of cash flows using the direct method.

Cash sales	\$450,000
Cash payments to suppliers	109,300
Cash payments to employees	95,780
Cash payments for income taxes	46,700
Cash receipts for accounts receivable	120,000
Cash payments for utilities	27,400

- 14.** Use the consolidated T accounts below to prepare the statement of cash flows for Allen Ales using the direct method. The company's 20Y5 income statement also shows the following amounts for 20Y5: sales, \$65,000; cost of merchandise sold, \$8,600; utilities expense, \$12,100; wages expense, \$9,100; and income tax expense, \$7,900. The company issued \$1,000 of common stock at par and sold equipment worth \$6,000 for \$8,800. Cash had a beginning balance of \$12,800.

Accounts Receivable	Accounts Payable—Suppliers	Accounts Payable—Utilities	Wages Payable
75,750	25,100	15,600	32,600
44,850	16,900	18,700	36,100

Income Taxes Payable	Merchandise Inventory
21,200	14,875
18,900	19,220

- 15.** Prepare the statement of cash flows for Tate's Place using the direct method. The company's 20Y5 income statement presents the following amounts: sales, \$100,750; cost of merchandise sold, \$24,500; utilities expense, \$16,100; wages expense, \$32,100; income tax expense, \$12,900; and legal expense, \$4,900. The company also issued \$2,000,000 of 5% bonds at face value (interest payable starting the following year), purchased a new building for \$500,000, and paid \$40,000 in dividends. The cash balance as of January 1, 20Y5, was \$46,300.

Accounts Receivable	Accounts Payable—Suppliers	Accounts Payable—Utilities	Income Taxes Payable
32,600	26,400	12,050	18,000
21,050	15,500	16,700	19,250

Wages Payable	Legal Expenses Payable	Merchandise Inventory
12,290	7,100	29,500
8,600	6,800	24,300

- 16.** Use the following information to calculate the free cash flow for 20Y5 and 20Y6.

Determine if the change indicates a favorable or unfavorable trend. Sixty percent of the net cash flow used for investing activities was used to replace existing capacity.

	<u>20Y6</u>	<u>20Y5</u>
Net cash flow from operating activities	\$ 97,500	\$ 100,350
Net cash flow used for investing activities	(110,000)	(125,000)
Net cash flow used for financing activities	(15,000)	(20,000)

- 17.** Calculate the free cash flow for Tate's Place for 20Y5 and 20Y6 using the information shown below. To maintain existing capacity, half of the net cash flow used for investing activities was used to replace outdated equipment. Is the change a favorable or unfavorable trend?

	<u>20Y6</u>	<u>20Y5</u>
Net cash flow from operating activities	\$ 99,300	\$ 95,600
Net cash flow used for investing activities	(90,000)	(87,500)
Net cash flow used for financing activities	(15,000)	(20,000)

- 18.** With the information below, calculate the company's free cash flow from 20Y5 and 20Y6. The company requires 70% of the net cash flow used for investing activities to maintain existing capacity. Is the change favorable or unfavorable?

	<u>20Y6</u>	<u>20Y5</u>
Net cash flow from operating activities	\$ 56,000	\$ 48,000
Net cash flow used for investing activities	(51,500)	(40,000)
Net cash flow used for financing activities	(15,000)	(20,000)