Chapter 13

Statement of Cash Flows

Study Guide Solutions

Fill-in-the-Blank Equations

1. Net cash flow from operating activities
2. Change in Cash
3. Cash used to purchase property, plant, and equipment
4. Ratio of free cash flow to sales

Exercises

1. Determine if each activity would be shown as an operating, a financing, or an investing activity on 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 Activities, Financing Activities, or Investing Activities 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 Activities, Financing Activities, or Investing Activities 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

Strategy: *Financing activities are activities associated with acquiring and repaying funds in order to maintain business. Investing activities provide gains and losses through the purchase and sale of assets, which may include land, buildings, equipment, and investments. Operating activities are the normal day-to-day cash inflows and outflows of the business.*

4. Indicate whether each of the following would be added to or deducted from net income in determining net cash flow from operating activities by the indirect method:

a. Decrease in prepaid expenses

Added

b. Increase in inventory

Deducted

c. Decrease in income taxes payable

Deducted

5. GTT Corporation's comparative balance sheet for current assets and liabilities is shown below. Adjust net income of $72,500 for changes in operating assets and liabilities to arrive at net cash flow from operating activities.

	Dec. 31, Year 2	Dec. 31, Year 1
Accounts receivable	$15,250	$10,900
Inventory	48,500	42,750
Accounts payable	10,250	7,500
Dividends payable	10,600	8,025

Net income	$ 72,500	
Adjustments to reconcile net income to net cash flow from operating activities:		
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(4,350)	
Increase in inventory	(5,750)	
Increase in accounts payable	2,750	
Net cash flow from operating activities		$65,150

6. Shown below is Pearl Corporation's comparative balance sheet for current assets and liabilities. Using the information presented, adjust net income of $124,000 for changes in operating assets and liabilities to arrive at net cash flow from operating activities.

	Dec. 31, Year 2	Dec. 31, Year 1
Accounts receivable	$35,000	$31,450
Inventory	27,500	25,200
Accounts payable	24,500	22,375
Dividends payable	41,000	47,500
Income taxes payable	7,800	7,475

Net income	$124,000	
Adjustments to reconcile net income to net cash flow from operating activities:		
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(3,350)	
Increase in inventory	(2,300)	
Increase in accounts payable	1,625	
Increase in income taxes payable	325	
Net cash flow from operating activities		$120,100

Strategy: *Under the indirect method, adjustments to net income must be made to determine net cash flow from operating activities. Expenses that do not affect cash are added. This includes depreciation of fixed assets and amortization of intangible assets. Losses on the disposal of assets are added and gains on the disposal of assets are deducted. Increases in noncash current operating assets and decreases in current operating liabilities are deducted, while decreases in noncash current operating assets and increases in current operating liabilities are added.*

7. Bennigan Inc. reported net income of $150,000 for 20Y5. In addition, the income statement reported $10,000 of depreciation expense and a $7,500 loss on the disposal of equipment. Using this information and the current operating assets and liabilities from the company's comparative balance sheet, which is shown below, prepare Bennigan Inc.'s Cash Flows from Operating Activities section of the statement of cash flows, using the indirect method.

	Dec. 31, 20Y6	Dec. 31, 20Y5	Increase (Decrease)
Accounts receivable	$24,375	$28,700	$(4,325)
Accounts payable	15,000	16,150	(150)

Cash flows from operating activities:		
Net income	$150,000	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation expense	10,000	
Loss on disposal of equipment	7,500	
Changes in current operating assets and liabilities:		
Decrease in accounts receivable	4,325	
Decrease in accounts payable	(150)	
Net cash flow from operating activities		$171,675

8. Using the following data, prepare Stanley Inc.'s Cash Flows from Operating Activities section of the statement of cash flows, using the indirect method.

Net income	$525,000
Depreciation expense	82,500
Gain on disposal of equipment	14,600
Increase in accounts receivable	10,150
Decrease in accounts payable	(3,300)

Cash flows from operating activities:		
Net income	$525,000	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation expense	82,500	
Gain on disposal of equipment	14,600	
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(10,150)	
Decrease in accounts payable	(3,300)	
Net cash flow from operating activities		$608,650

9. The net income reported on Sherman Corp.'s income statement for the current year was $91,600. Depreciation recorded on store equipment for the year amounted to $24,375. Using this information and the following balances of the current asset and current liability accounts at the beginning and end of the year, prepare the Cash Flows from Operating Activities section of Sherman Corp.'s statement of cash flows, using the indirect method.

	End of Year	Beginning of Year
Cash	$35,200	$28,500
Accounts receivable (net)	49,000	45,500
Inventories	36,275	41,000
Prepaid expenses	5,150	6,200
Accounts payable	21,300	18,500
Salaries payable	5,550	4,875

Cash flows from operating activities:		
Net income	$91,600	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation expense	24,375	
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(3,500)	
Decrease in inventories	4,725	
Decrease in prepaid expenses	1,050	
Increase in accounts payable	2,800	
Increase in salaries payable	675	
Net cash flow from operating activities		$121,725

Strategy: *To prepare the Cash Flows from Operating Activities section of the statement of cash flows, first list the net income. Then add or subtract any adjustments to reconcile net income to net cash flow from operating activities. These include expenses that do not affect cash, losses and gains on the disposal of assets, and changes in current operating assets and liabilities. The result is the net cash flow from operating activities.*

10. Gibbs Corporation purchased land for $500,000. Later in the year, the company sold a different piece of land with a book value of $375,000 for $280,000. Using this information, prepare the Cash Flows from Investing Activities section of Gibbs Corporation's statement of cash flows.

Cash flows from investing activities:		
Cash received from sale of land	$ 280,000	
Cash paid for purchase of land	(500,000)	
Net cash flow used for investing activities		$(220,000)

11. On the basis of the details of the following accounts, prepare the Cash Flows from Investing Activities section of the statement of cash flows.

ACCOUNT Land **ACCOUNT NO.**

				Balance	
Date	**Item**	**Debit**	**Credit**	**Debit**	**Credit**
Jan. 1	Balance			372,000	
June 16	Purchased for cash	80,500		452,500	
Oct. 29	Sold for $74,300		24,200	428,300	

ACCOUNT Building **ACCOUNT NO.**

				Balance	
Date	**Item**	**Debit**	**Credit**	**Debit**	**Credit**
Jan. 1	Balance			180,000	
Dec. 1	Purchased for cash	84,000		264,000	

ACCOUNT Accumulated Depreciation **ACCOUNT NO.**

				Balance	
Date	**Item**	**Debit**	**Credit**	**Debit**	**Credit**
Jan. 1	Balance				54,200
Dec. 1	Depreciation for the year		7,000		61,200

Cash flows from investing activities:		
Cash received from sale of land	$ 74,300	
Cash paid for purchase of land	(80,500)	
Cash paid for purchase of building	(180,000)	
Net cash flow used for investing activities		$(186,200)

12. TechSystems Corp. reported net income of $200,000 for 20Y7. In addition, the income statement reported $35,000 of depreciation expense and a $25,000 gain on the sale of land. The noncurrent assets from the company's comparative balance sheet are as follows:

	Dec. 31, 20Y7	Dec. 31, 20Y7	Increase (Decrease)
Land	$ 175,000	$200,000	$(75,000)
Equipment	400,000	350,000	50,000
Accumulated depreciation—equipment	(100,000)	(80,000)	20,000

There were no disposals of equipment, and all purchases of equipment were for cash. Prepare TechSystems Corp.'s Cash Flows from Investing Activities section of the statement of cash flows.

Cash flows from investing activities:		
Cash received from sale of land	$100,000	
Cash paid for purchase of equipment	(50,000)	
Net cash flow from investing activities		$50,000

Strategy: *To prepare the Cash Flows from Investing Activities section of the statement of cash flows, changes in each long-term asset owned by a company must be analyzed for its effect on cash flows from investing activities. This includes the purchase and sale of property, plant, and equipment.*

13. Emerald Corp. received $1,000,000 from issuing shares of its common stock. During the year, Emerald Corp. paid $500,000 to retire bonds and paid dividends of $350,000. Using this information, prepare the Cash Flows from Financing Activities section of the company's statement of cash flows.

Cash flows from financing activities:		
Cash paid to retire bonds	$ (500,000)	
Cash received from issuing common stock	1,000,000	
Cash paid for dividends	(350,000)	
Net cash flow from financing activities		$150,000

14. On the basis of the details of the following bonds payable and related discount accounts, prepare the Cash Flows from Financing Activities section of the statement of cash flows, assuming there was no gain or loss on retiring the bonds.

ACCOUNT Bonds Payable **ACCOUNT NO.**

				Balance	
Date	**Item**	**Debit**	**Credit**	**Debit**	**Credit**
Jan. 1	Balance				500,000
Jan. 2	Retire bonds	75,000			425,000
July 30	Issue bonds		200,000		625,000

ACCOUNT Discount on Bonds Payable **ACCOUNT NO.**

				Balance	
Date	**Item**	**Debit**	**Credit**	**Debit**	**Credit**
Jan. 1	Balance			28,500	
Jan. 2	Retire bonds		9,000	19,500	
July 30	Issue bonds	10,000		29,500	
Dec. 31	Amortize discount		875	28,625	

Cash flows from financing activities:		
Cash received from issuing bonds payable	$190,000	
Cash paid to redeem bonds payable	(66,000)	
Net cash flow from financing activities		$124,000

15. Fitness First reported net income of $88,000 for 20Y7. The liability and equity accounts from the company's comparative balance sheet are as follows:

	Dec. 31, 20Y7	Dec. 31, 20Y7	Increase (Decrease)
Accounts payable	$ 26,500	$ 22,000	$ 4,500
Dividends payable	7,000	5,500	1,500
Bonds payable	100,000	80,000	20,000
Common stock, $5 par value	90,000	78,000	12,000
Excess of issue over par value—common stock	200,000	135,000	65,000
Retained earnings	160,000	100,000	60,000

During the year, Fitness First retired bonds payable at their face amount, declared dividends of $10,000, and issued 1,000 shares of common stock for $25 per share. Using the information provided, prepare the company's Cash Flows from Financing Activities section of the statement of cash flows.

Cash flows from financing activities:		
Cash paid to retire bonds	$20,000	
Cash received from issuing common stock	25,000	
Cash paid for dividends	(8,500)	
Net cash flow from financing activities		$36,500

Strategy: *To prepare the Cash Flows from Financing Activities section of the statement of cash flows, changes in each of a company's long-term liabilities and stockholders' equity must be analyzed for its effect on cash flows from financing activities. This includes issuing and retiring equity and debt securities.*

16. List the errors you find in the following statement of cash flows. The cash balance at the beginning of the year was $262,000. All other amounts are correct, except the cash balance at the end of the year.

Hammerhead Inc.
Statement of Cash Flows
For the Year Ended December 31, 20Y7

Cash flows from operating activities:		
Net income	$ 378,000	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation	82,000	
Gain on sale of investments	15,400	
Changes in current operating assets and liabilities:		
Decrease in accounts receivable	(20,600)	
Increase in inventories	28,500	
Decrease in accounts payable	(2,400)	
Increase in income taxes payable	4,000	
Net cash flow from operating activities		$484,900
Cash flows from investing activities:		
Cash received from sale of land	$ 125,000	
Cash paid for purchase of equipment	162,000	
Net cash flow from investing activities		287,000
Cash flows from financing activities:		
Cash received from issuing common stock	$ 310,000	
Cash paid for dividends	(178,000)	
Net cash flow from financing activities		132,000
Change in cash		$903,000
Cash at the end of the year		641,000
Cash at the beginning of the year		$262,000

In the Cash Flows from Operating Activities section:

- The gain on sale of investments should have been deducted from net income.
- The decrease in accounts receivable should have been added to net income.
- The increase in inventories should have been deducted from net income.
- Because of the errors listed above, the net cash flow from operating activities should be $438,300 rather than $484,900.

In the Cash Flows from Financing Activities section:

- The cash paid for purchase of equipment should have been deducted from rather than added to the cash received from sale of land.
- Because of the error listed above, the net cash flow used for investing activities should be $(37,000) rather than $287,000.

Because of the incorrect net cash flow from operating activities and net cash flow from investing activities, the change in cash should be $533,300 rather than $903,000.

The cash at the beginning of the year should be added to the change in cash to compute the cash at the end of the year. The correct amount of cash at the end of the year is $795,300.

17. The comparative balance sheet of Jones Furniture & Appliances for December 31, 20Y7 and 20Y6, is shown as follows:

	Dec. 31, 20Y7	Dec. 31, 20Y6
Assets		
Cash	$ 95,000	$ 112,000
Accounts receivable (net)	350,000	320,000
Inventories	685,000	600,000
Investments	0	100,000
Land	375,000	0
Equipment	620,000	575,000
Accumulated depreciation—equipment	(275,000)	(200,000)
Total assets	$1,850,000	$1,507,000
Liabilities and Stockholders' Equity		
Accounts payable (merchandise creditors)	$ 260,000	$ 210,000
Accrued expenses payable (operating expenses)	75,000	82,000
Dividends payable	25,000	20,000
Common stock, $10 par	500,000	450,000
Paid-in capital: Excess of issue over par—common stock	140,000	100,000
Retained earnings	850,000	645,000
Total liabilities and stockholders' equity	$1,850,000	$1,507,000

Additional data obtained from an examination of the accounts in the ledger for 20Y7 are as follows:

A. The investments were sold for $120,000 cash.

B. Equipment and land were acquired for cash.

C. There were no disposals of equipment during the year.

D. The common stock was issued for cash.

E. There was a $280,000 credit to Retained Earnings for net income.

F. There was a $75,000 debit to Retained Earnings for cash dividends declared.

Prepare Jones Furniture & Appliances' statement of cash flows, using the indirect method of presenting cash flows from operating activities.

Jones Furniture & Appliances
Statement of Cash Flows
For the Year Ended December 31, 20Y7

Cash flows from operating activities:		
Net income	$ 280,000	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation	75,000	
Gain on sale of investments	(20,000)	
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(30,000)	
Increase in inventories	(85,000)	
Increase in accounts payable	50,000	
Decrease in accrued expenses payable	(7,000)	
Net cash flow from operating activities		$ 63,000
Cash flows from investing activities:		
Cash received from sale of investments	$ 120,000	
Cash paid for purchase of land	(375,000)	
Cash paid for purchase of equipment	(45,000)	
Net cash flow used for investing activities		(300,000)
Cash flows from financing activities:		
Cash received from sale of common stock	$ 90,000	
Cash paid for dividends	(70,000)	
Net cash flow from financing activities		20,000
Change in cash		$ (17,000)
Cash at the beginning of the year		112,000
Cash at the end of the year		$ 95,000

18. The comparative balance sheet of Four Seasons Enterprises Inc. for December 31, 20Y7 and 20Y6, is as follows:

	Dec. 31, 20Y7	Dec. 31, 20Y6
Assets		
Cash	$ 395,000	$ 88,000
Accounts receivable (net)	225,000	242,000
Inventories	638,000	576,000
Prepaid expenses	20,500	15,000
Equipment	895,000	750,000
Accumulated depreciation—equipment	(175,000)	(140,000)
Total assets	$1,998,500	$1,531,000
Liabilities and Stockholders' Equity		
Accounts payable (merchandise creditors)	$ 100,000	$ 92,000
Mortgage note payable	0	275,000
Common stock, $5 par	500,000	250,000
Paid-in capital: Excess of issue over par—common stock	250,000	125,000
Retained earnings	1,148,500	789,000
Total liabilities and stockholders' equity	$1,998,500	$1,531,000

Additional data obtained from the income statement and from an examination of the accounts in the ledger for 20Y7 are as follows:

A. Net income, $175,000.

B. Depreciation reported on the income statement, $100,000.

C. Equipment was purchased at a cost of $115,000 and fully depreciated equipment costing $30,000 was discarded, with no salvage value realized.

D. The mortgage note payable was not due for five years, but the terms permitted earlier payment without penalty.

E. 20,000 shares of common stock were issued at $25 for cash.

F. Cash dividends declared and paid, $35,000.

Prepare a statement of cash flows, using the indirect method of presenting cash flows from operating activities.

Four Seasons Enterprises Inc.
Statement of Cash Flows
For the Year Ended December 31, 20Y7

Cash flows from operating activities:		
Net income	$ 175,000	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation	100,000	
Changes in current operating assets and liabilities:		
Decrease in accounts receivable	17,000	
Increase in inventories	(62,000)	
Increase in prepaid expenses	(5,500)	
Increase in accounts payable	8,000	
Net cash flow from operating activities		$ 232,500
Cash flows from investing activities:		
Cash paid for equipment	$(115,000)	
Net cash flow used for investing activities		(115,000)
Cash flows from financing activities:		
Cash received from sale of common stock	$ 500,000	
Cash paid for dividends	(35,000)	
Cash paid to retire mortgage note payable	(275,000)	
Net cash flow from financing activities		190,000
Change in cash		$ 307,500
Cash at the beginning of the year		88,000
Cash at the end of the year		$ 395,000

Strategy: *To prepare a statement of cash flows, list the cash flows from operating activities followed by the cash flows from investing activities and the cash flows from financing activities. The result of adding the net cash flows from operating, investing, and financing activities is the change in cash for the period. This increase or decrease in cash is added to the cash at the beginning of the period to determine the cash at the end of the period.*

19. Use the following information to calculate the free cash flow for 20Y5 and 20Y6. Sixty percent of the net cash flow used for investing activities was used to replace existing capacity. Determine if the change indicates a favorable or an unfavorable trend.

	20Y6	**20Y5**
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)

	20Y6	**20Y5**
Net cash flow from operating activities	$ 97,500	$100,350
Cash used to purchase property, plant, and equipment	(66,000)	(75,000)
Free cash flow	$ 31,500	$ 25,350

The increase in free cash flow indicates a favorable trend for the company.

20. 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 an unfavorable trend?

	20Y6	**20Y5**
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)

	20Y6	**20Y5**
Net cash flow from operating activities	$ 99,300	$ 95,600
Cash used to purchase property, plant, and equipment	(45,000)	(43,750)
Free cash flow	$ 54,300	$ 51,850

The increase in free cash flow is a favorable trend for the company.

21. With the information below, calculate the company's free cash flow for 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?

	20Y6	**20Y5**
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)

	20Y6	**20Y5**
Net cash flow from operating activities	$ 56,000	$ 48,000
Cash used to purchase property, plant, and equipment	(36,050)	(28,000)
Free cash flow	$ 19,950	$ 20,000

The decrease in free cash flow represents an unfavorable trend for the company.

Strategy: *Calculate free cash flow by subtracting the amount of cash used to purchase the property, plant, and equipment necessary to maintain current operations from the cash flows from operating activities. An increase is considered favorable because it means that the company is producing enough income from its main operations in order to maintain its current capacity and growth.*

22. Use the information in Exercise 19 to compute the company's ratio of free cash flow to sales for 20Y5 and 20Y6, assuming sales were $414,000 for 20Y6 and $487,000 for 20Y5. Round answers to one decimal place.

20Y5 ratio of free cash flow to sales: 5.2%; $25,530 ÷ $487,000

20Y6 ratio of free cash flow to sales: 7.6%; $31,500 ÷ $414,000

23. Tate's Place had sales of $522,700 in 20Y6 and $496,000 in 20Y5. Using this information and the information in Exercise 20, compute Tate's Place's ratio of free cash flow to sales for 20Y5 and 20Y6. Round answers to one decimal place.

20Y5 ratio of free cash flow to sales: 10.5%; $51,850 ÷ $496,000

20Y6 ratio of free cash flow to sales: 10.4%; $54,300 ÷ $522,700

24. Use the information in Exercise 21 to compute the company's ratio of free cash flow to sales for 20Y5 and 20Y6, assuming sales were \$321,000 for 20Y6 and \$293,000 for 20Y5. Round answers to one decimal place.

20Y5 ratio of free cash flow to sales: 6.8%; \$20,000 ÷ \$293,000

20Y6 ratio of free cash flow to sales: 6.2%; \$19,950 ÷ \$321,000