SOLUTIONS Learning Goal 21

Multiple Choice

1. c Gains and losses are removed from operating activities for two reasons: they are part of investing activities, not operating, and also a gain or loss is not the total cash flow from a sale; it is part of the calculation of the total sales proceeds.
2. d
3. d
4. c A statement of cash flows and an income statement cover the same time period.
5. d
6. b Revenue and expense does not appear on a statement of cash flows. Choice "a" is a non-cash investing and financing activity. Choices "c" and "d" are investing activities.
7. a
8. b
9. d This should be reported at the bottom of the statement of cash flows as a non-cash investing and financing activity of $150,000.
10. b Even though the sale incurred a loss, some cash was received because the land was sold. Therefore the transaction will increase cash.
11. c Book value of the asset is ($15,000 – $12,000) = $3,000. A gain of $5,000 means that total cash received is $3,000 + $5,000 = $8,000.
12. c An increase in a current asset is a negative adjustment. A loss requires a positive adjustment to cancel out the loss. An increase in current liabilities (a and d) requires a positive adjustment.
13. b A gain requires a negative adjustment to cancel out the gain. An increase in a current asset or decrease in current liability requires a negative adjustment.
14. a $75,000 + $3,000 + $5,000 – $1,000 = $82,000
15. b
16. d The direct method reports cash inflows and outflows from operations. Depreciation and amortization are non-cash items and can be omitted. Gains and losses are part of investing activities.
17. b $100,000 – $3,000 = $97,000. If accounts receivable increases, less cash is received than whatever is the amount of sales on account that is part of the total sales. The part of total sales that is cash sales is always an inflow of cash.
18. d $90,000 + $10,000 – $4,000 = $96,000
19. d
20. d $117,000 – $68,000 – $40,000 = $9,000 free cash flow

SOLUTIONS

Learning Goal 21, continued

Discussion Questions and Brief Exercises

1. The statement of cash flows reports the following information:

   - The cash balance at the beginning of the current period
   - Why cash increased or decreased during the period
   - The cash balance at the end of the current period.

   The purpose of the statement of cash flows is to: 1. Explain the change in cash from the prior balance sheet date to the current balance sheet date. This is done by classifying changes in cash into three categories: operating, investing, and financing. 2. Show the cash balances on each date.

2. a. An owner or manager uses a statement of cash flows to evaluate inflows and outflows of cash in the categories of operating, investing, and financing activities. In effect the statement of cash flows is a historical summary of the most recent change in cash from the end of the prior period to the end of the next period. The manager uses this cash flow information as an indicator of the need for change or possible corrective cash management actions. Examples would be planning for major expenditures, analyzing the ability to repay debt, to make or change dividend payments, or determining the reliability of operating cash flow. For managerial purposes, the statement of cash flows works best when it is used together with a cash budget, which is a more detailed planning device to control receipts and expenditures.
   b. A creditor is primarily interested in determing if a loan will be repaid. A creditor reviews the cash flow statements over several recent periods to determine the trend and reliability of operating cash flow as well as the recurring debt and interest payments. Calculations of free cash flow and ratio analysis are also applied.
   c. An investor applies the same analytical tools as a creditor; however, the investor is in a more vulnerable position because creditors have legal repayment priority over investors. Investors will focus heavily on operating cash flow to evaluate possible inconsistencies with the income statement, and then check free cash flow amount and reliability to determine if the company has the ability to: make fixed debt, interest, and expense payments, continue to pay dividends, and make investments to expand and grow to remain competitive. These are all investor requirements.

3. Operating activities is considered to be the most important section of the statement of cash flows, because it the continuing source of business activity that is expected to provide cash. Investing and financing activities involve many non-recurring cash transactions. (Exceptions are debt principal payments and dividends.)

4. An accrual basis income statement reports all revenues and all expenses in order to report the total change in business wealth as a result of business activities. However, revenues can increase non-cash assets or even reduce liabilities; therefore, revenues do not correspond to cash received. Likewise, expenses do not always involve the payment of cash; non-cash assets can be reduced or liabilities increased. Furthermore, there can be many sources and uses of cash that do not appear on an income statement, such as receiving advance payments from customers or repaying debt. It is necessary to adjust the income statement for all these types of items so that it will report only activities that involve cash receipts and payments.

5. The terms "indirect" and "direct" refer only to the format and presentation of the operating activities section of the statement of cash flows. They do not affect investing or financing activities.

SOLUTIONS

Learning Goal 21, continued

Discussion Questions and Brief Exercises, *continued*

The indirect method begins with net income and all adjustments are made to net income. In other words, the adjustments convert net income into a cash basis. The direct method uses the income statement as the format for operating activities. Beginning with sales revenue and working down the income statement, the direct method converts each line item on the income statement to a cash basis.

Regardless of whether the net income or individual revenue and expense items are adjusted, both the indirect and direct methods result in the same operating cash flow.

6. a. Yes. Net income related activities may provide little cash or use cash for various reasons such as slow receivable collection, large inventory purchases, and large payments on current payables. Furthermore, cash can be used in investing activities (such as major asset purchases) and in financing activities (such as dividends and debt repayment).
b. Yes. Net income related activities might (at least for a short time) provide significant cash or not use cash by collecting or selling receivables, postponing current liability payments, and postponing purchases and services. At the same time investing activities could provide cash by selling assets and financing activities could provide cash by borrowing or issuing stock.
c. See answers above.

7. a. The indirect method shows the differences between cash flow, particularly operating cash flow, and net income. b. The indirect method shows the changes in key current balance sheet accounts, which aids in analysis. c. The indirect method requires fewer adjustments and is easier (after practice) to prepare. The direct method does have the advantage of showing the individual cash flow effect of each income statement item that is part of operating activities.

8. If the indirect method is used, a positive adjustment is made to net income for the amount of depreciation. This is done to cancel out the non-cash deduction that reduced net income. Depreciation is always a non-cash expense. (Similar adjustments are made for other non-cash expenses such as intangible asset amortization, bond discount amortization, and uncollectible account expense using the allowance method.) The direct method simply ignores depreciation expense and does not include it in operating activities. This is because depreciation is always a non-cash expense.

9. a. Issuing bonds or notes payable to purchase an asset b. Issuing stock to retire debt c. Issuing stock to purchase an asset d. Converting bonds or notes payable into stock Disclosure is usually at the bottom of the statement of cash flows, but may also be in footnotes.

10.

	Item	O	I	F
a.	A change in accounts receivable	X		
b.	A change in long-term notes payable			X
c.	Payment of dividends			X
d.	Gain on sale of land on the income statement	X	X	
e.	Purchase of equipment for cash		X	
f.	Interest revenue on the income statement	X		
g.	Interest expense on the income statement	X		
h.	A change in unearned revenue	X		

SOLUTIONS

Learning Goal 21, continued

Discussion Questions and Brief Exercises, *continued*

11.

	Item	O	I	F	NC
a.	A sale of equipment		X		
b.	A purchase of company's own stock (treasury stock)			X	
c.	Conversion of outstanding bonds into outstanding stock				X
d.	Collection of a note receivable		X		
e.	Dividends paid			X	
f.	Dividends received	X			
g.	Sale of land in return for buyer's stock				X
h.	Sale of long-term investment for cash		X		

12. a. Indirect: positive adjustment to net income. Direct: omitted from operating activites.
b. Indirect: gain is a negative adjustment to net income and loss is a positive adjustment to net income. Direct: omitted from operating activites.
c. Indirect: a positive or negative adjustment to net income, depending on the change. Direct: a positive or negative adjustment to sales, depending on the change.
d. Indirect: a positive or negative adjustment to net income, depending on the change. Direct: a positive or negative adjustment to wages expense, depending on the change.
e. Indirect: no adjustment for cost of goods sold; however, a change in a related payable will result in an adjustment. Direct: no adjustment for cost of goods sold; however, cost of goods sold itself will be adjusted for a change in the inventory balance and for a change in in a related payable.

13.

Net income		$77,500
Add: items providing cash or not using cash		
depreciation expense	$5,000	
increase in accrued liabilities	6,000	
decrease in accounts receivable	3,900	
loss on sale of equipment	1,500	
total increases		16,400
Less: items not providing cash or using cash		
decrease in accounts payable	(1,600)	
increase in merchandise inventory	(12,000)	
total decreases		(13,600)
Net cash provided by operating activities		$80,300

Notice that payment of dividends is a financing activity.

14.

		(Calculations)
Receipts		
Collections from customers	$743,900	(740,000 + 3,900)
Payments		
Merchandise inventory	(388,600)	(375,000 + 12,000 + 1,600)
Operating expenses	(275,000)	(281,000 – 6,000)
Net cash provided by operating activities	$ 80,300	

SOLUTIONS

Learning Goal 21, continued

Discussion Questions and Brief Exercises, *continued*

15.

	a.	b.	c.	d.	e.
Equipment, net: beginning balance	$ 50,000	$ 120,000	$88,000	$100,000	$93,000
Purchases of equipment	10,000	5,000	22,000	**46,000**	**11,000**
Book value of assets sold	**10,000**	**17,000**	**58,500**	15,000	5,000
Depreciation expense	3,000	7,000	4,500	7,000	4,000
Equipment, net: ending balance	47,000	101,000	47,000	124,000	95,000
Gain (loss) on sale	-0-	2,000	(6,000)	(13,000)	(4,500)
Cash increase (decrease) in					
investing activities	**-0-**	**14,000**	**30,500**	**(44,000)**	**(10,500)**

Calculations: a good approach for finding the cost of assets purchased or the book value of assets sold is the formula:

	Beginning balance, net*	+	Cost of purchases	–	Book value of assets sold	–	Depreciation expense	=	Ending balance, net*
a.	50,000	+	10,000	–	*X*	–	3,000	=	47,000
b.	120,000	+	5,000	–	*X*	–	7,000	=	101,000
c.	88,000	+	22,000	–	*X*	–	4,500	=	47,000
d.	100,000	+	*X*	–	15,000	–	7,000	=	124,000
e.	93,000	+	*X*	–	5,000	–	4,000	=	95,000

* “Net” means asset book value (cost – accumulated depreciation)

Cash increase or decrease:

a. Book value: assets sold $10,000 (no gain or loss) = cash received from sale $10,000
   Cash received from sale $10,000 – purchases $10,000 = 0 cash change.
b. Book value: assets sold $17,000 + gain on sale $2,000 = cash received from sale $19,000
   Cash received from sale $19,000 – purchases $5,000 = $14,000 cash increase
c. Book value: assets sold $58,500 – loss on sale $6,000 = cash received from sale $52,500
   Cash received from sale $52,500 – purchases $22,000 = cash increase $30,500
d. Book value: assets sold: $15,000 – loss on sale $13,00 = cash received from sale $2,000
   Cash received from sale $2,000 – purchases $46,000 = cash decrease $44,000
e. Book value: assets sold: $5,000 – loss on sale $4,500 = cash received from sale $500
   Cash received from sale $500 – purchases $11,000 = cash decrease $10,500

16.

a. For investing activities, the accounts to analyze are non-current asset accounts, accumulated depreciation, and any gain or loss on the disposal of the assets.
b. For financing activities, the accounts to examine are long-term debt and stockholders’ (or owner’s) equity accounts.

SOLUTIONS Learning Goal 21, continued

Discussion Questions and Brief Exercises, *continued*

17.

a. If the account receivable balance is increasing, this is a negative adjustment. It means that the full amount of sales revenue is not being collected in cash. It would indicate that it is becoming more difficult to collect receivables. There could be various reasons for this.
b. This is a worse situation than “a” because if sales are increasing, then collections from the additional receivables should be increasing in roughly the same proportion, perhaps with some delay. This is either a serious collection issue or fraudulent (and therefore uncollectible) sales are being recorded.
c. This is a positive adjustment because allowing payables to increase decreases the amount of cash paid for assets and services. You should determine why payables are being allowed to increase.
d. An increase in inventory is a negative adjustment. In this case, why would more inventory be purchased as sales are declining? If this continues it will soon lead to very diminished (or even negative) operating cash flow. Inventory could be a very large adjustment item for many businesses.

Note: in all the above situations it is very important to compare cash flow statements over several periods.

18. Free cash flow = $50,000 – $7,000 – $5,000 = $38,000

19.

a. $140,000 – $36,000 – $50,000 + $75,000 = $129,000
b. $140,000/$1,225,000 = .114 or, 1/.114 = about 8.8 years to pay off existing debt **if** operating cash flow were to remain the same.
c. ($140,000 + $80,000)/$80,000 = 2.75 times interest coverage.

20.

Ft. Myers Co., Statement of Cash Flows For the Year Ended December 31, 2017		
Cash flows from operating activities		
Net income (loss)		$3,500
Add: adjustment items providing cash or not using cash		
Depreciation expense	$5,100	
Decrease in accounts receivable	4,900	
Decrease in prepaid insurance	1,000	
Increase in unearned revenue	400	11,400
Subtract: adjustment items not providing cash or using cash		
Increase in merchandise inventory	(2,900)	
Decrease in accounts payable	(7,100)	
Decrease in other accrued liabilities	(6,100)	(16,100)
Net cash used by operating activities		(1,200)

SOLUTIONS

Learning Goal 21, continued

Discussion Questions and Brief Exercises, *continued*

21.

Torrance, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2017

Cash flows from operating activities		
Net income (loss)		$29,000
Add: adjustment items providing cash or not using cash		
Depreciation expense	$9,000	
Decrease merchandise inventory	2,000	
Increase in accounts payable	4,000	15,000
Subtract: adjustment items not providing cash or using cash		
Increase in accounts receivable	(2,000)	
Increase in prepaid expenses	(1,000)	
Decrease in income taxes payable	(2,000)	(5,000)
Net cash provided by operating activities		$39,000

22.

Torrance, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2017

Cash flows from operating activities		
Receipts:		
Cash collections from customers	$410,000	
Cash received from interest earned	4,000	
Total cash receipts		$414,000
Payments:		
Merchandise inventory	(229,000)	
Operating expenses	(134,000)	
Income tax	(12,000)	
Total cash payments		(375,000)
Net cash provided by operating activities		39,000
Cash flows from investing activities		
Purchase of equipment	(18,000)	
Sale of equipment	10,000	
Net cash used by investing activities		(8,000)
Cash flows from financing activities		
Payments on long-term note payable	(1,000)	
Cash dividends paid	(20,000)	
Common stock issued	20,000	
Net cash used by financing activities		(1,000)
Net increase in cash		30,000
Beginning cash balance		22,000
Ending cash balance		$ 52,000

SOLUTIONS Learning Goal 21, continued

Discussion Questions and Brief Exercises, *continued*

- Cash collected from customers: \$412,000 – \$2,000 = \$410,000
- Payments for merchandise inventory: \$235,000 – \$2,000 – \$4,000 = \$229,000
- Payments for operating expenses: \$142,000 – \$9,000 + \$1,000 = \$134,000
- Purchase of equipment: Increase in furniture and fixtures: \$222,000 + X – \$10,000 – \$9,000 = \$221,000; X = \$18,000
- Note that there is no gain or loss on the equipment sold. It was sold at its cost minus accumulated depreciation: \$15,000 – \$5,000 = \$10,000 (book value).

23. The key to answering these questions is to understand that the adjustments can be different because different things are being adjusted. With the direct method, each of the *individual revenues and expenses* are being adjusted into a cash basis. With the indirect method, *net income* is being adjusted into a cash basis.

a. Net income is the result of combining positive items (revenues) with negative items (expenses). With an increase in accounts receivable, the positive item (cash basis revenue;) that is, "collections from customers", is smaller. Because the positive item is smaller, cash basis net income will also be smaller. Conversely, if the positive item (cash basis revenue) is greater then the result (cash basis net income) will also be greater. Example:

Revenue	–	Expense	=	Net income
100	–	80	=	20

\$1 increase in A/R: \$1 negative adjustment to both cash basis revenue and net income. Direct and indirect methods result in the same operating cash flow: \$19.

Cash basis revenue (collections from customers: direct method)	–	Cash basis expense (direct method)	=	Cash basis net income (indirect method)
100 – 1 = 99	–	80	=	20 – 1 = 19

\$1 decrease in A/R: \$1 positive adjustment to both revenue and net income. Direct and indirect methods result in the same operating cash flow: \$21.

Cash basis revenue (collections from customers: direct method)	–	Cash basis expense (direct method)	=	Cash basis net income (indirect method)
100 + 1 = 101	–	80	=	20 + 1 = 21

SOLUTIONS Learning Goal 21, continued

Discussion Questions and Brief Exercises, *continued*

b. Because an expense is a negative item, an increase in an expense is a decrease in net income. A decrease in an expense is an increase in net income. An increase in a payable related to the expense decreases the cash basis expense ("cash payments"). Because the payment is less, the cash-basis net income will be more. This means that net income would require a positive adjustment. The effect is reversed for decreases in payables. Example:

Revenue	–	Expense	=	Net income
100	–	80	=	20

$1 increase in A/P: $1 negative adjustment to payments and a $1 positive adjustment to net income. Direct and indirect methods result in the same operating cash flow: $21.

Cash basis revenue (collections from customers: direct method)	–	Cash basis expense (direct method)	=	Cash basis net income (indirect method)
100	–	80 – 1 = 79	=	20 + 1 = 21

$1 decrease in A/P: $1 positive adjustment to payments and a $1 negative adjustment to net income. Direct and indirect methods result in same answer: $19.

Cash basis revenue (collections from customers: direct method)	–	Cash basis expense (direct method)	=	Cash basis net income (indirect method)
100	–	80 + 1 =81	=	20 – 1 = 19

c. For the direct method, depreciation expense can always be omitted as an adjustment because it is never a cash payment. For the indirect method, the depreciation expense must be added back to net income, thereby increasing net income on a cash basis, to cancel out the effect of an expense that reduced the net income but did not use cash.

Important: Notice that although direct and indirect adjustments can be different, their effects on operating cash flow are THE SAME. Both the direct and indirect methods result in the same amount of cash flow from operating activities.

24. This is a highly unethical, and probably fraudulent, action. A decrease in a short-term liability related to business operations reduces operating cash flow, so the president's suggestion of removing this item will overstate cash flow from operating activities by $100,000 and make it appear that long-term debt (a financing activity) is being paid. The president surely understands that cash flow from operating activities is the most important part of the statement of cash flows, and understands the effect this will have. His justification that nobody will be hurt by this action is of course mistaken – the action misleads employees, investors, and lenders into thinking that operating cash flow is better than it is, putting them at increased risk of financial loss.

SOLUTIONS

Learning Goal 21, continued

LG 21-1.

	Event	O	I	F	NC
1.	Interest expense of $4,000	X			
2.	A decrease in wages payable of $3,500	X			
3.	Cash sales of $61,000	X			
4.	Conversion of $100,000 of bonds into common stock				X
5.	Cash payment of dividends of $50,000			X	
6.	An increase in accounts receivable of $20,000	X			
7.	An increase in accounts payable of $15,000	X			
8.	A purchase of $30,000 of land by issuing stock				X
9.	Cash receipts of dividends of $5,000	X			
10.	A sale of equipment, no gain or loss: book value is $2,000		X		
11.	Gain on sale of equipment: $900		X		
12.	Interest revenue of $500	X			
13.	Payment of loan principal of $10,000 to the lender			X	
14.	Made a long-term loan to a customer: $25,000		X		
15.	An increase in prepaid rent of $10,000	X			

SOLUTIONS

Learning Goal 21, continued

LG 21-2.

a.

Fresno Consulting Services, Inc.
Statement of Cash Flows
For the Year Ended June 30, 2017

Cash flows from operating activities		
Net income (loss)		$ 35,200
Add: adjustment items providing cash or not using cash		
Depreciation expense	2,500	
Decrease in prepaid tax	400	
Increase in accounts payable	5,400	8,300
Subtract: adjustment items not providing cash or using cash		
Increase in accounts receivable	4,100	
Decrease in other accrued liabilities	1,100	
Decrease in unearned revenue	800	(6,000)
Net cash provided by operating activities		37,500
Cash flows from investing activities		
Purchase of equipment		(9,800)
Cash flows from financing activities		
Borrowing cash with long-term loan	25,000	
Issuance of common stock	125,000	
Net cash provided by financing activities		150,000
Net increase in cash		177,700
Beginning cash balance		21,000
Ending cash balance		$198,700

b. This cash flow statement shows an increase in cash of $177,700, but most of the increase has come from financing activities. The company has issued stock and borrowed cash for a total of $150,000. Operating activities has provided $37,500 in cash; however, a closer look at operating activities reveals that accounts receivable are increasing, indicating a possible slowing of collections, and accounts payable are increasing indicating a slowing of payments to creditors. Free cash flow is $37,500 – $9,800 = $27,700. (no dividend payments)

SOLUTIONS

Learning Goal 21, continued

LG 21-3.

a.

Fresno, Inc. Statement of Cash Flows For the Year Ended June 30, 2017		
Cash flows from operating activities		
Receipts:		
Cash collections from customers		$818,800
Payments:		
Various operating expenses	$(776,700)	
Tax expense	(4,600)	
Total cash payments		(781,300)
Net cash provided by operating activities		37,500
Cash flows from investing activities		
Purchase of equipment		(9,800)
Cash flows from financing activities		
Borrowing cash with long-term loan	25,000	
Issuance of common stock	125,000	
Net cash provided by financing activities		150,000
Net increase in cash		177,700
Beginning cash balance		21,000
Ending cash balance		$198,700

- Cash collections from customers: $823,700 – $4,100 – $800 = $818,800
- Payments for operating expenses: $781,000 – $5,400 + 1,100 = $776,700
- Payments for tax expense: $5,000 – $400 = $4,600

b. This cash flow statement shows a large increase in cash $177,700, but most of the increase has come from financing activities. The company has issued stock and borrowed cash for a total of $150,000. Operating activities has provided $37,500 in cash; however, a closer look at operating activities reveals that accounts receivable are increasing, indicating a possible slowing of collections, and accounts payable are increasing indicating a slowing of payments to creditors. Free cash flow is $37,500 – $9,800 = $27,700. (no dividend payments)

SOLUTIONS Learning Goal 21, continued

LG 21-4.

a.

Norwalk Company, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2017

Cash flows from operating activities		
Net income (loss)		$ 89,000
Add: adjustment items providing cash or not using cash		
Depreciation expense	$32,000	
Increase in accounts payable	8,000	40,000
Subtract: adjustment items not providing cash or using cash		
Gain on sale	(7,000)	
Increase in accounts receivable	(24,000)	
Increase in merchandise inventory	(22,000)	
Decrease in income taxes payable	(3,000)	(56,000)
Net cash provided by operating activities		73,000
Cash flows from investing activities		
Purchase of equipment	(34,000)	
Sale of equipment	22,000	
Net cash used by investing activities		(12,000)
Cash flows from financing activities		
Issuance of common stock	89,000	
Payment of notes payable	(125,000)	
Cash dividends paid	(50,000)	
Net cash used by financing activities		(86,000)
Net decrease in cash		(25,000)
Beginning cash balance		128,000
Ending cash balance		$103,000

b. Net income is $89,000 and operating cash flow is $73,000. This is a difference of $16,000. The net change in cash is a negative (a decrease) $25,000. This is $114,000 less than net income. Clearly net income is not the same thing as cash flow.

c. The largest sources of cash were the sale of equipment for $22,000 and issuance of stock for $89,000. The greatest uses of cash were the notes payable payment of $125,000, dividend payment of $50,000 and purchase of equipment for $34,000.

- Dividends are calculated as the net income (which increases retained earnings) of $89,000 minus the total increase in retained earnings of $39,000.

SOLUTIONS

Learning Goal 21, continued

LG 21-5.

a.

Norwalk Company, Inc. Statement of Cash Flows For the Year Ended December 31, 2017		
Cash flows from operating activities		
Receipts:		
Cash collections from customers		$1,306,000
Payments:		
Merchandise inventory	$(788,000)	
Operating expenses	(414,000)	
Interest paid	(4,000)	
Income tax	(27,000)	
Total cash payments		(1,233,000)
Net cash provided by operating activities		73,000
Cash flows from investing activities		
Purchase of equipment	(34,000)	
Sale of equipment	22,000	
Net cash used by investing activities		(12,000)
Cash flows from financing activities		
Issuance of common stock	89,000	
Payment of notes payable	(125,000)	
Cash dividends paid	(50,000)	
Net cash used by financing activities		(86,000)
Net increase in cash		(25,000)
Beginning cash balance		128,000
Ending cash balance		$ 103,000

- Cash collections from customers: $1,330,000 – $24,000 = $1,306,000
- Payments for merchandise inventory: $774,000 + $22,000 – $8,000 = $788,000
- Payments for income tax: $24,000 + $3,000 = $27,000

b. Net income is $89,000 and operating cash flow is $73,000. This is a difference of $16,000. The net change in cash is a negative (a decrease) $25,000. This is $114,000 less than net income. Clearly net income is not the same thing as cash flow.

c. The largest sources of cash were the sale of equipment for $22,000 and issuance of stock for $89,000. The greatest uses of cash were the notes payable payment of $125,000, dividend payment of $50,000 and purchase of equipment for $34,000.

- Dividends are calculated as the net income (which increases retained earnings) of $89,000 minus the total increase in retained earnings of $39,000.

SOLUTIONS

Learning Goal 21, continued

LG 21-6.

a.

Milton Company, Inc.
Income Statement
For the Year Ended December 31, 2017

Net sales		$303,000
Cost of goods sold		121,000
Gross profit		182,000
Operating expenses		
Combined expenses	$109,000	
Depreciation expense	28,000	
Total operating expenses		137,000
Operating income		45,000
Other gain or loss, revenue or expense		
Loss on sale		4,000
Net income		$ 41,000

b.

Milton Company, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2017

Cash flows from operating activities		
Net income (loss)		$41,000
Add: adjustment items providing cash or not using cash		
Depreciation expense	$28,000	
Loss on sale	4,000	
Decrease in accounts receivable	22,000	54,000
Subtract: adjustment items not providing cash or using cash		
Increase in merchandise inventory	(35,000)	
Decrease in accounts payable	(3,000)	
Decrease in combined accrued expense payable	(4,000)	(42,000)
Net cash provided by operating activities		53,000
Cash flows from investing activities		
Purchase of equipment	(26,000)	
Sale of equipment	2,000	
Net cash used by investing activities		(24,000)
Cash flows from financing activities		
Cash dividends paid		(15,000)
Net increase in cash		14,000
Beginning cash balance		38,000
Ending cash balance		$52,000

Note: Cost of goods sold can be identified by the credit to merchandise inventory identified as "cost of sales". Depreciation expense can be identified by the increase in accumulated depreciation.

- Received from equipment sale: $15,000 – $9,000 = $6,000 book value – $4,000 loss = $2,000
- Cash received from equipment sale ($15,000 – $9,000) book value – $4,000 loss.

SOLUTIONS

Learning Goal 21, continued

LG 21-7.

a.

Milton Company, Inc. Condensed Income Statement Year Ended December 31, 2017		
Net sales		$303,000
Cost of goods sold		121,000
Gross profit		182,000
Operating expenses		
Depreciation expense	28,000	
Combined expenses	109,000	137,000
Operating income		45,000
Other gain or loss, revenue or expense		
Loss on equipment sale		(4,000)
Net income		$ 41,000

b.

Milton Company, Inc. Statement of Cash Flows For the Year Ended December 31, 2017		
Cash flows from operating activities		
Receipts:		
Cash collections from customers		$325,000
Payments:		
Merchandise inventory	$(159,000)	
Combined operating expenses	(113,000)	
Total cash payments		(272,000)
Net cash provided by operating activities		53,000
Cash flows from investing activities		
Purchase of equipment	(26,000)	
Sale of equipment	2,000	
Net cash used by investing activities		(24,000)
Cash flows from financing activities		
Cash dividends paid		(15,000)
Net increase in cash		14,000
Beginning cash balance		38,000
Ending cash balance		$ 52,000

- Cash collections from customers: $303,000 + $22,000 = $325,000
- Payments for merchandise: $156,000 + $3,000 = $159,000
- Payments for combined operating expense: $109,000 + $4,000 = $113,000
- Received from equipment sale: $15,000 – $9,000 = $6,000 book value – $4,000 loss = $2,000

SOLUTIONS

Learning Goal 21, continued

LG 21-8.

a.

Bangor Enterprises, Inc.
Statement of Cash Flows
For the Year Ended June 30, 2017

Cash flows from operating activities		
Net income (loss)		$ (33,700)
Add: adjustment items providing cash or not using cash		
Depreciation expense	$ 31,800	
Loss on sale	7,600	
Decrease in accounts receivable	28,400	
Decrease in merchandise inventory	1,900	
Increase in accounts payable	12,800	
Increase in interest payable	800	83,300
Subtract: adjustment items not providing cash or using cash		
Increase in prepaid rent	(500)	
Decrease in accrued expense payable	(5,900)	(6,400)
Net cash provided by operating activities		43,200
Cash flows from investing activities		
Purchase of land	(75,000)	
Purchase of equipment	(43,200)	
Sale of equipment	32,500	
Net cash used by investing activities		(85,700)
Cash flows from financing activities		
Issued common stock	80,900	
Cash dividends paid	(10,000)	
Net cash provided by financing activities		70,900
Net increase in cash		28,400
Beginning cash balance		91,200
Ending cash balance		$119,600
Non-cash investing and financing activities		
Issued bonds for land purchase		$ 50,000

- Book value of equipment sold: \$32,500 sales price + loss on sale \$7,600 = \$40,100
- Cost of equipment purchased: \$280,700 + X – \$40,100 – \$31,800 = \$252,000
  X = \$43,200. (Using the formula given in the text)
- Dividends paid: \$78,400 – \$33,700 – X = \$34,700. X = \$10,000

b. This is a problem that provides a dramatic illustration that income and cash flow are very different things. This company has a net loss but shows cash *provided* by operating activities that is a larger absolute amount than the net loss. How did the company manage this?
1. A large portion of the loss is created by non-cash expenses and losses (depreciation, use of inventory, and loss on equipment sale) 2. The company was able to collect a significant amount of receivables 3. The company deferred the payment of a significant amount of payables. All of these actions significantly increased cash flow from operating activities.

SOLUTIONS Learning Goal 21, continued

LG 21-8, *continued*

A large amount of cash was required for the purchase of land and equipment. This was primarily achieved by issuing stock and issuing bonds for land in a partially non-cash transaction.

Although the cash flow appears favorable, issuing stock will be difficult to repeat in future periods, as the company will have to depend more on cash flow from operating activities. Furthermore, a calculation of free cash flow indicates that operating cash flow will have to increase and/or capital expenditure will have to decrease: $43,200 – $85,700 – $10,000 = $(52,500). The cash flow to debt ratio is $43,200/($619,500 + $561,800)/2 = .073; cash basis times-interest-earned is ($43,200 + $19,900)/$19,900 = 3.17. (Interest paid is interest expense adjusted for changes in interest payable or prepaid interest. Here, interest payable increased, reducing the amount of cash interest paid.)

LG 21-9.

a.

Bangor Enterprises, Inc.
Statement of Cash Flows
For the Year Ended June 30, 2017

Cash flows from operating activities		
Receipts:		
Cash collections from customers	$2,879,100	
Interest earned	1,800	
Total cash collections		$2,880,900
Payments:		
Merchandise inventory	(1,929,500)	
Rent	(57,500)	
Combined operating expenses	(830,800)	
Interest	(19,900)	
Total cash payments		(2,837,700)
Net cash provided by operating activities		43,200
Cash flows from investing activities		
Purchase of land	(75,000)	
Purchase of equipment	(43,200)	
Sale of equipment	32,500	
Net cash used by investing activities		(85,700)
Cash flows from financing activities		
Issued common stock	80,900	
Cash dividends paid	(10,000)	
Net cash provided by financing activities		70,900
Net increase in cash		28,400
Beginning cash balance		91,200
Ending cash balance		$ 119,600
Non-cash investing and financing activities		
Issued bonds for land purchase		$ 50,000

SOLUTIONS

Learning Goal 21, continued

LG 21-9, *continued*

- Cash collections from customers: $2,850,700 + $28,400 = $2,879,100
- Cash payments for merchandise: $1,944,200 – $1,900 – $12,800 = $1,929,500
- Cash payments for rent: $57,000 + $500 = $57,500
- Book value of equipment sold: $32,500 sales price + loss on sale $7,600 = $40,100
- Cost of equipment purchased: $280,700 + *X* – $40,100 – $31,800 = $252,000
  X = $43,200. (Using the formula given in the text)
- Dividends paid: $78,400 – $33,700 – *X* = $34,700. *X* = $10,000
- Cash payments for combined operating expenses: $824,900 + $5,900 = $830,800
- Cash payments for interest: $20,700 – $800 = $19,900

b. This is a problem that provides a dramatic illustration that income and cash flow are very different things. This company has a net loss but shows cash *provided* by operating activities that is a larger absolute amount than the net loss. How did the company manage this?
1. A large portion of the loss is created by non-cash expenses and losses (depreciation, use of inventory, and loss on equipment sale) 2. The company was able to collect a significant amount of receivables. 3. The company deferred the payment of a significant amount of payables. All of these actions significantly increased cash flow from operating activities.

A large amount of cash was required for the purchase of land and equipment. This was primarily achieved by issuing stock and issuing bonds for land in a partially non-cash transaction.

Although the cash flow appears favorable, the borrowing and issuing stock will be difficult to repeat in future periods, as the company will have to depend more on cash flow from operating activities. Furthermore, a calculation of free cash flow indicates that operating cash flow will have to increase and/or capital expenditure will have to decrease: $43,200 – $85,700 – $10,000 = $ (52,500). The cash flow to debt ratio is $43,200/($619,500 + $561,800)/2 = .073; cash basis times-interest-earned is ($43,200 + $19,900)/$19,900 = 3.17. (Interest paid is interest expense adjusted for changes in interest payable or prepaid interest. Here, interest payable increased, reducing the amount of cash interest paid.)

SOLUTIONS

Learning Goal 21, continued

LG 21-10.

a.

Sacramento Co., Inc. Statement of Cash Flows For the Year Ended December 31, 2017		
Cash flows from operating activities		
Net income (loss)		$144,360
Add: adjustment items providing cash or not using cash		
Depreciation expense	$35,200	
Loss on sale	4,500	
Decrease in accounts receivable	11,340	
Decrease in notes receivable	10,000	
Increase in accounts payable	12,070	73,110
Subtract: adjustment items not providing cash or using cash		
Increase in prepaid insurance	(1,210)	
Increase in merchandise inventory	(4,280)	
Decrease in accrued expense payable	(9,600)	
Decrease in unearned revenue	(3,500)	(18,590)
Net cash provided by operating activities		198,880
Cash flows from investing activities		
Increase in notes receivable	(25,150)	
Purchase of equipment	(50,000)	
Sale of equipment	14,800	
Net cash used by investing activities		(60,350)
Cash flows from financing activities		
Decrease in notes payable	(114,340)	
Issued common stock	100,000	
Cash dividends paid	(100,000)	
Net cash provided by financing activities		(114,340)
Net increase in cash		24,190
Beginning cash balance		53,290
Ending cash balance		$ 77,480
Non-cash investing and financing activities		
Converted bonds into stock		$100,000

- Book value of assets sold: sale price $14,800 + loss on sale $4,500 = $19,300
- Purchase of equipment: $289,200 + X – $19,300 – $35,200 = $284,700; X = $50,000
- Dividends paid: $236,160 + $144,360 – X = $280,520; X = $100,000

Note: An important element in this problem is distinguishing between types of notes receivable. The short-term note receivable arises from sales to customers, so it is part of operating activities. The long-term note receivable is an investment, such as making a loan as an investor or buying a loan as an investment. Also notice that both interest received and interest paid are included in operating activities.

SOLUTIONS Learning Goal 21, continued

LG 21-10, *continued*

b. The company has a strong operating cash flow. There were substantial decreases in operating receivables that provided cash as well as substantial deferring of payment of accounts payable. Substantial payment of accrued payables reduced operating cash flow. It is likely that cash flow from operating activities may be smaller next period, because the same amount of positive adjustments may be difficult to repeat.

Equipment purchases and increases in notes receivable investments were large uses of cash, as was a major payment of notes payable. An issue of common stock provided $100,000 of cash, but this probably cannot be repeated next period.

Free cash flow: $198,880 – $35,200 – $100,000 = $63,680. Cash flow to debt ratio: $198,880/($285,390 + $500,760)/2 = .505. Cash Basis times-interest-earned ratio: ($198,880 + $22,170)/$22,170 = 9.97. (Note: that interest paid is the same amount as interest expense: There is no interest payable or prepaid interest to create a possible adjustment.) These are very favorable ratios.

SOLUTIONS

Learning Goal 21, continued

LG 21-10, *continued*

Account Titles		Dr.		Cr.		
Balance sheet accounts	12/31/16					12/31/17
Debit Balances						
Cash	53,290	p	24,190			77,480
Accounts receivable	72,660			a	11,340	61,320
Notes receivable, short-term	29,100			b	10,000	19,100
Prepaid insurance	3,350	c	1,210			4,560
Merchandise inventory	154,120	d	4,280			158,400
Notes receivable, long-term	185,200	e	25,150			210,350
Equipment	485,700	f	50,000	h	25,000	510,700
Total	983,420					1,041,910
Credit Balances						
Accounts payable	61,280			i	12,070	73,350
Accrued expenses payable	41,080	j	9,600			31,480
Unearned revenue	12,000	k	3,500			8,500
Accumulated depreciation	196,500	h	5,700	g	35,200	226,000
Bonds payable	100,000		*100,000			-0-
Notes payable	286,400	l	114,340			172,060
Common stock	50,000			m	100,000	250,000
					*100,000	
Retained earnings	236,160	o	100,000	n	144,360	280,520
Total	983,420					1,041,910
Statement of Cash Flows						
Operating Activities						
Add:						
Net income		n	144,360			
Depreciation expense		g	35,200			
Loss on sale		h	4,500			
Decrease in accounts receivable		a	11,340			
Decrease in notes receivable		b	10,000			
Increase in accounts payable		i	12,070			
Subtract:						
Increase in prepaid insurance				c	1,210	
Increase in merchandise inventory				d	4,280	
Decrease in accrued payables				j	9,600	
Decrease in unearned revenue				k	3,500	
Investing Activities						
Increase in notes receivable				e	25,150	
Equipment purchase				f	50,000	
Equipment sale		h	14,800			
Financing Activities						
Notes payable decrease				l	114,340	
Common stock increase		m	100,000			
Dividends paid				o	100,000	
			332,270		308,080	
				p	24,190	
Non-cash investing & financing	*100,000		332,270		332,270	

SOLUTIONS Learning Goal 21, continued

LG 21-10, *continued*

- Book value of equipment sold: \$14,800 sales price + \$4,500 loss = \$19,300 book value.
- Cost of equipment purchased: \$289,200 + X – \$19,300 – \$35,200 = \$284,700; X = \$50,000
- Accumulated depreciation on equipment sold: \$196,500 – X + \$35,200 = \$226,000; X = \$5,700
- Cost of equipment sold: \$19,300 book value + \$5,700 accumulated depreciation = \$25,000

LG 21-11.

a.

Sacramento Co., Inc.
Statement of Cash Flows
For the Year Ended December 31, 2017

Cash flows from operating activities		
Receipts:		
Cash collections from customers	\$852,340	
Interest earned	11,830	
Total cash collections		\$864,170
Payments:		
Merchandise inventory	(462,940)	
Combined operating expenses	(136,700)	
Interest	(22,170)	
Income tax	(43,480)	
Total cash payments		(665,290)
Net cash provided by operating activities		198,880
Cash flows from investing activities		
Increase in notes receivable	(25,150)	
Purchase of equipment	(50,000)	
Sale of equipment	14,800	
Net cash used by investing activities		(60,350)
Cash flows from financing activities		
Loan payment	(114,340)	
Issued common stock	100,000	
Cash dividends paid	(100,000)	
Net cash provided by financing activities		(114,340)
Net increase in cash		24,190
Beginning cash balance		53,290
Ending cash balance		\$ 77,480
Non-cash investing and financing activities		
Converted bonds into stock		\$100,000

- Cash collections from customers: \$834,500 + \$10,000 + \$11,340 – \$3,500 = \$852,340
- Cash payments for merchandise: \$470,730 + \$4,280 – \$12,070 = \$462,940
- Cash payments for operating expenses: \$125,890 + \$1,210 + \$9,600 = \$136,700
- Book value of assets sold: sale price \$14,800 + loss on sale \$4,500 = \$19,300
- Purchase of equipment: \$289,200 + X – \$19,300 – \$35,200 = \$284,700; X = \$50,000
- Dividends paid: \$236,160 + \$144,360 – X = \$280,520; X = \$100,000

SOLUTIONS

Learning Goal 21, continued

LG 21-11, *continued*

a.

Account Titles	.		Dr.		Cr.	
Balance sheet accounts	12/31/16					12/31/17
Debit Balances						
Cash	53,290	o	24,190			77,480
Accounts receivable	72,660			a	11,340	61,320
Notes receivable, short-term	29,100			a	10,000	19,100
Prepaid insurance	3,350	d	1,210			4,560
Merchandise inventory	154,120	b	4,280			158,400
Notes receivable, long-term	185,200	i	25,150			210,350
Equipment	485,700	j	50,000	g	25,000	510,700
Total	983,420					1,041,910
Credit Balances						
Accounts payable	61,280			b	12,070	73,350
Accrued expenses payable	41,080	d	9,600			31,480
Unearned revenue	12,000	a	3,500			8,500
Accumulated depreciation	196,500	g	5,700	c	35,200	226,000
Bonds payable	100,000	k	*100,000			-0-
Notes payable	286,400	l	114,340			172,060
Common stock	50,000			m	100,000	250,000
				k	*100,000	
Retained earnings	236,160	n	100,000	xx	144,360	280,520
Total	983,420					1,041,910
Income statement						
Sales				a	834,500	
Cost of goods sold		b	470,730			
Depreciation expense		c	35,200			
Combined operating expenses		d	125,890			
Interest expense		e	22,170			
Interest earned				f	11,830	
Loss on equipment sales		g	4,500			
Income tax expense		h	43,480			
Net income		xx	143,360			
Statement of cash flows						
Operating Activities						
Collections from customers		a	852,340			
Interest received		f	11,830			
Merchandise inventory				b	462,940	
Combined operating expenses				d	136,700	
Interest paid				e	22,170	
Income tax				h	43,480	
Investing Activities						
Increase in notes receivable				i	25,150	
Equipment purchase				j	50,000	
Equipment sale		g	14,800			
Financing Activities						
Loan payment				l	114,340	
Stock issuance		m	100,000			
Dividends paid				n	100,000	
			978,970		954,780	
				o	24,190	
Non-cash investing & financing	*100,000		978,970		978,970	

SOLUTIONS Learning Goal 21, continued

LG 21-11, *continued*

- Book value of equipment sold: $14,800 sales price + $4,500 loss = $19,300 book value.
- Cost of equipment purchased: $289,200 + *X* – $19,300 – $35,200 = $284,700; *X* = $50,000
- Accumulated depreciation on equipment sold: $196,500 – *X* + $35,200 = $226,000; *X* = $5,700
- Cost of equipment sold: $19,300 book value + $5,700 accumulated depreciation = $25,000

Note: An important element in this problem is distinguishing between types of notes receivable. The short-term note receivable arises from sales to customers, so it is part of operating activities. The long-term note receivable is an investment, such as making a loan as an investor or buying a loan as an investment. Also notice that both interest received and interest paid are included in operating activities. Equipment purchases and increases in notes receivable investments were large uses of cash, as was a major payment of notes payable. An issue of common stock provided $100,000 of cash, but this probably cannot be repeated next period. Free cash flow: $198,880 – $35,200 – $100,000 = $63,680.

b. The company has a strong operating cash flow. There were substantial decreases in operating receivables that provided cash as well as substantial deferring of payment of accounts payable. Substantial payment of accrued payables reduced operating cash flow. It is likely that cash flow from operating activities may be smaller next period, because the same amount of positive adjustments may be difficult to repeat.

Equipment purchases and increases in notes receivable investments were large uses of cash, as was a major payment of notes payable. An issue of common stock provided $100,000 of cash, but this probably cannot be repeated next period.

Free cash flow: $198,880 – $35,200 – $100,000 = $63,680. Cash flow to debt ratio: $198,880/($285,390 + $500,760)/2 = .505.

Cash Basis times-interest-earned ratio: ($198,880 + $22,170)/$22,170 = 9.97. (Note: that interest paid is the same amount as interest expense: There is no interest payable or prepaid interest to create a possible adjustment.) These are very favorable ratios.

SOLUTIONS Learning Goal 21, continued

LG 21-12.

a.

Omaha, Inc. Statement of Cash Flows For the Year Ended December 31, 2017		
Cash flows from operating activities		
Net income (loss)		$42,790
Add: adjustment items providing cash or not using cash		
Depreciation expense	$20,250	
Decrease in prepaid travel	2,110	
Increase in unearned revenue	2,500	24,860
Subtract: adjustment items not providing cash or using cash		
Gain on equipment sales	(3,180)	
Increase in accounts receivable	(15,020)	
Increase in merchandise inventory	(11,470)	
Decrease in accounts payable	(6,170)	
Decrease in accrued expense payable	(10,610)	(46,450)
Net cash provided by operating activities		21,200
Cash flows from investing activities		
Purchase of equipment	(44,350)	
Sale of equipment	26,930	
Net cash used by investing activities		(17,420)
Cash flows from financing activities		
Loan payment	(17,670)	
Cash from treasury stock re-issue	4,800	
Cash dividends paid	(10,000)	
Net cash used by financing activities		(22,870)
Net decrease in cash		(19,090)
Beginning cash balance		58,610
Ending cash balance		$39,520

- Proceeds from sale of automotive equipment: $12,000 – gain $5,100 = $6,900 book value of equipment sold. $17,850 + *X* – $6,900 – $14,930 = 28,160; *X* = $32,140 cost of automotive equipment purchased.
- Plant equipment: 75,710 + $12,210 – *X* – $5,320 = $65,750; *X* = $16,850 book value of plant equipment sold. Total gain from sales of equipment $3,180 – gain from automotive equipment $5,100 = $1,920 loss on sale of plant equipment. Proceeds from sale of plant equipment: $16,850 – $1,920 = $14,930.

Summary:
Cash paid for equipment purchased: $12,210 + 32,140 = $44,350
Cash received for equipment sold: $12,000 + $14,930 = $26,930

SOLUTIONS

Learning Goal 21, continued

LG 21-12, *continued*

- Proceeds from issuance of treasury stock: $12 × 400 = $4,800. The $8,000 increase in stockholders' equity from the elimination of the treasury stock balance does not provide cash, and the $3,200 reduction in owner's equity (below) does not use cash. Although treasury stock transactions are reported only as changes in stockholders' equity and not as gains or losses, it might be helpful to imagine the transaction as if it were a "sale" with a "loss" as follows: $8,000 cost – $3,200 "loss" = $4,800 cash received.
- Dividends paid: $90,070 beginning retained earnings + $42,790 net income – $3,200 treasury stock sale – *X* = $119,660 ending retained earnings. *X* = $10,000 dividends.

b. The statement of cash flows indicates that there are several primary reasons for the $19,090 decrease in cash, despite the improved sales and net income from the prior period. First, operating cash flow was less than net income because: a) accounts receivable increased, thereby delaying the receipt of cash from the sales, b) inventory increased, and c) substantial payments were made to reduce the balances of accounts payable and accrued payables. (Note: Reducing liabilities means using cash.) Secondly, purchases of equipment exceeded the proceeds received from the equipment sold. Finally, the combination of the payment on the long-term loan plus the dividends paid substantially exceeded the cash collected from issuing the treasury stock.

Free cash flow is: $21,200 – $17,420 – $10,000 = $(6,220). Cash flow to debt ratio: $21,200/($169,090 + $201,040)/2 = .115. Cash basis times-interest-earned is: ($21,200 + $2,350)/$2,350 = 10.

SOLUTIONS

Learning Goal 21, continued

LG 21-12, *continued*

Account Titles		Dr.		Cr.		
Balance sheet accounts	12/31/16					12/31/17
Debit Balances						
Cash	58,610			p	19,090	39,520
Accounts receivable	61,990	a	15,020			77,010
Prepaid travel	4,800			b	2,110	2,690
Merchandise inventory	234,150	c	11,470			245,620
Automotive equipment	195,350	h	32,140	i	15,000	212,490
Plant equipment	275,920	j	12,210	k	35,000	253,130
Treasury stock	8,000			l	8,000	-0-
Total	838,820					830,460
Credit Balances						
Accounts payable	57,460	d	6,170			51,290
Accrued expenses payable	110,080	e	10,610			99,470
Unearned revenue	5,000			f	2,500	7,500
Notes payable	28,500	m	17,670			10,830
Accumulated dep'n.—automotive	177,500	i	8,100	g	14,930	184,330
Accumulated dep'n.—plant	200,210	k	18,150	g	5,320	187,380
Common stock	170,000					170,000
Retained earnings	90,070	n	10,000	o	42,790	119,660
		l	3,200			
Total	838,820					830,460
Statement of Cash Flows						
Operating Activities						
Add:						
Net income		o	42,790			
Depreciation expense		g	20,250			
Decrease in prepaid travel		b	2,110			
Increase in unearned revenue		f	2,500			
Subtract:						
Gain on sale of equipment		k	1,920	i	5,100	
Increase in accounts receivable				a	15,020	
Increase in merchandise inventory				c	11,470	
Decrease in accounts payable				d	6,170	
Decrease in accrued payables				e	10,610	
Investing Activities						
Equipment purchase—auto				h	32,140	
Equipment purchase—plant				j	12,210	
Sale of equipment—auto		i	12,000			
Sale of equipment—plant		k	14,930			
Financing Activities						
Loan payment				m	17,670	
Treasury stock re-issue		l	4,800			
Dividends paid				n	10,000	
			101,300		120,390	
		p	19,090			
			120,390		120,390	

SOLUTIONS

Learning Goal 21, continued

LG 21-12, *continued*

- Cost of automotive equipment sold: 195,350 + 32,140 – 212,490 = 15,000
- Accumulated depreciation on auto equipment sold: 177,500 + 14,930 – 184,330 = 8,100
- Cost of plant equipment sold: 275,920 + 12,210 – 253,130 = 35,000
- Accumulated depreciation on plant equipment sold: 200,210 + 5,320 – 187,380 = 18,150

LG 21-13.

Omaha, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2017

Cash flows from operating activities		
Receipts:		
Cash collections from customers	$928,800	
Interest earned	1,000	
Total cash collections		$929,800
Payments:		
Merchandise inventory	(629,520)	
Travel	(30,310)	
Combined operating expenses	(232,170)	
Interest paid	(2,350)	
Income tax	(14,250)	
Total cash payments		(908,600)
Net cash provided by operating activities		21,200
Cash flows from investing activities		
Purchase of equipment	(44,350)	
Sale of equipment	26,930	
Net cash used by investing activities		(17,420)
Cash flows from financing activities		
Loan payment	(17,670)	
Cash from treasury stock re-issue	4,800	
Cash dividends paid	(10,000)	
Net cash used by financing activities		(22,870)
Net decrease in cash		(19,090)
Beginning cash balance		58,610
Ending cash balance		$ 39,520

- Cash collections from customers: $941,320 – $15,020 + $2,500 = $928,800
- Cash payments for merchandise: $611,880 + $11,470 + $6,170 = $629,520
- Cash payments for travel: $32,420 – $2,110 = $30,310
- Cash payments for combined operating expenses: $221,560 + $10,610 = $232,170
- Proceeds from sale of automotive equipment: $12,000 – gain $5,100 = $6,900 book value of equipment sold. $17,850 + *X* – $6,900 – $14,930 = 28,160; *X* = $32,140 cost of automotive equipment purchased.
- Plant equipment: 75,710 + $12,210 – *X* – $5,320 = $65,750; *X* = $16,850 book value of plant equipment sold. Total gain from sales of equipment $3,180 – gain from automotive equipment $5,100 = $1,920 loss on sale of plant equipment. Proceeds from sale of plant equipment: $16,850 – $1,920 = $14,930.

SOLUTIONS

Learning Goal 21, continued

LG 21-13, *continued*

Summary:
Cash paid for equipment purchased: $12,210 + 32,140 = $44,350
Cash received for equipment sold: $12,000 + $14,930 = $26,930

- Proceeds from issuance of treasury stock: $12 × 400 = $4,800. The $8,000 increase in stockholders' equity from the elimination of the treasury stock balance does not provide cash, and the $3,200 reduction in owner's equity (below) does not use cash. Although treasury stock transactions are reported only as changes in stockholders' equity and not as gains or losses , it might be helpful to imagine the transaction as if it were a "sale" with a "loss" as follows: $8,000 cost – $3,200 "loss" = $4,800 cash received.
- Dividends paid: $90,070 beginning retained earnings + $42,790 net income – $3,200 treasury stock sale – *X* = $119,660 ending retained earnings. *X* = $10,000 dividends.

b. The statement of cash flows indicates that there are several primary reasons for the $19,090 decrease in cash, despite the improved sales and net income from the prior period. First, operating cash flow was less than net income because: a) accounts receivable increased, thereby delaying the receipt of cash from the sales, b) inventory increased, and c) substantial payments were made to reduce the balances of accounts payable and accrued payables. (Note: Reducing liabilities means using cash.) Secondly, purchases of equipment exceeded the proceeds received from the equipment sold. Finally, the combination of the payment on the long-term loan plus the dividends paid substantially exceeded the cash collected from issuing the treasury stock.

Free cash flow is: $21,200 – $17,420 – $10,000 = $(6,220). Cash flow to debt ratio: $21,200/($169,090 + $201,040)/2 = .115. Cash basis times-interest-earned is: ($21,200 + $2,350)/$2,350 = 10.

SOLUTIONS Learning Goal 21, continued

LG 21-13, *continued*

a.

Account Titles		Dr.	Cr.	
Balance sheet accounts	12/31/16			12/31/17
Debit Balances				
Cash	58,610		p 19,090	39,520
Accounts receivable	61,990	a 15,020		77,010
Prepaid travel	4,800		d 2,110	2,690
Merchandise inventory	234,150	b 11,470		245,620
Automotive equipment	195,350	i 32,140	j 15,000	212,490
Plant equipment	275,920	k 12,210	l 35,000	253,130
Treasury stock	8,000		m 8,000	-0-
Total	838,820			830,460
Credit Balances				
Accounts payable	57,460	b 6,170		51,290
Accrued expenses payable	110,080	e 10,610		99,470
Unearned revenue	5,000		a 2,500	7,500
Notes payable	28,500	o 17,670		10,830
Accumulated dep'n.—automotive	177,500	j 8,100	c 14,930	184,330
Accumulated dep'n.—plant	200,210	l 18,150	c 5,320	187,380
Common stock	170,000			170,000
Retained earnings	90,070	n 10,000	xx 42,790	119,660
		m 3,200		
Total	838,820			830,460
Income statement				
Sales			a 941,320	
Cost of goods sold		b 611,880		
Depreciation expense		c 20,250		
Travel expense		d 32,420		
Combined operating expenses		e 221,560		
Interest earned			f 1,000	
Interest expense		g 2,350		
Gain on equipment sales		l 1,920	j 5,100	
Income tax expense		h 14,250		
Net income		xx 42,790		
Statement of cash flows				
Operating Activities				
Collections from customers		a 928,800		
Interest earned		f 1,000		
Merchandise inventory			b 629,520	
Travel			d 30,310	
Combined operating expenses			e 232,170	
Interest paid			g 2,350	
Income tax			h 14,250	
Investing Activities				
Equipment purchase—auto			i 32,140	
Equipment purchase—plant			k 12,210	
Sale of equipment—auto		j 12,000		
Sale of equipment—plant		l 14,930		
Financing Activities				
Loan payment			o 17,670	
Treasury stock re-issue		m 4,800		
Dividends paid			n 10,000	
		961,500	980,620	
		p 19,090		
		980,620	980,620	

SOLUTIONS

Learning Goal 21, continued

LG 21-13, *continued*

- Cost of automotive equipment sold: 195,350 + 32,140 – 212,490 = 15,000
- Accumulated depreciation on auto equipment sold: 177,500 + 14,930 – 184,330 = 8,100
- Cost of plant equipment sold: 275,920 + 12,210 – 253,130 = 35,000
- Accumulated depreciation on plant equipment sold: 200,210 + 5,320 – 187,380 = 18,150