

CHAPTER 13

STATEMENT OF CASH FLOWS

DISCUSSION QUESTIONS

1. It is costly to accumulate the data needed and to prepare the statement of cash flows.
2. It focuses on the differences between net income and cash flows from operating activities, and the data needed are generally more readily available and less costly to obtain than is the case for the direct method.
3. In a separate schedule of noncash investing and financing activities accompanying the statement of cash flows.
4. The \$30,000 increase must be added to income from operations because the amount of cash paid to merchandise creditors was \$30,000 less than the amount of purchases included in the cost of goods sold.
5. The \$25,000 decrease in salaries payable should be deducted from income to determine the amount of cash flows from operating activities. The effect of the decrease in the amount of salaries owed was to pay \$25,000 more cash during the year than had been recorded as an expense.
6.
 - A. \$100,000 gain
 - B. Cash inflow of \$600,000
 - C. The gain of \$100,000 would be deducted from net income in determining net cash flow from operating activities; \$600,000 would be reported as cash flows from investing activities.
7. Cash flows from financing activities—issuance of bonds, \$1,960,000 ($\$2,000,000 \times 98\%$)
8.
 - A. Cash flows from investing activities—Cash received from the disposal of fixed assets, \$15,000
The \$15,000 gain on asset disposal should be deducted from net income in determining net cash flow from operating activities under the indirect method.
 - B. No effect
9. The same. The total amount reported as the net cash flow from operating activities is not affected by the use of the direct or indirect method.
10. Cash received from customers, cash payments for merchandise, cash payments for operating expenses, cash payments for interest, cash payments for income taxes.

BASIC EXERCISES**BE 13–1**

- | | |
|--------------|--------------|
| A. Investing | D. Operating |
| B. Investing | E. Operating |
| C. Operating | F. Financing |

BE 13–2

Net income.....	\$224,500
Adjustments to reconcile net income to net cash flow from operating activities:	
Depreciation.....	11,575
Amortization of patents.....	2,500
Gain from sale of investments.....	<u>(33,190)</u>
Net cash flow from operating activities.....	\$205,385

BE 13–3

Net income.....	\$75,800
Changes in current operating assets and liabilities:	
Increase in accounts receivable.....	(5,000)
Increase in inventory.....	(7,450)
Increase in accounts payable.....	<u>3,380</u>
Net cash flow from operating activities.....	\$66,730

Note: The change in dividends payable impacts the cash paid for dividends, which is disclosed under financing activities.

BE 13–4

Cash flows from operating activities:	
Net income.....	\$396,200
Adjustments to reconcile net income to net cash flow from operating activities:	
Depreciation.....	61,250
Loss on disposal of equipment.....	27,600
Changes in current operating assets and liabilities:	
Increase in accounts receivable.....	(9,000)
Increase in accounts payable.....	<u>3,350</u>
Net cash flow from operating activities.....	\$479,400

BE 13–5

The gain on the sale of land is subtracted from net income in the Operating Activities section.

Gain on sale of land.....	\$ (40,000)
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The purchase and sale of land is reported as part of cash flows from investing activities as shown below.

Cash received from sale of land.....	240,000
Cash paid for purchase of land.....	(400,000)

BE 13–6

Cash flows from financing activities:

Cash received from issuing common stock	\$800,000	
Cash received from issuing bonds	700,000	
Cash paid for dividends	<u>(90,000)</u>	
Net cash from financing activities		\$1,410,000

Appendix 2 BE 13–7

Sales.....	\$112,000
Decrease in accounts receivable.....	<u>10,500</u>
Cash received from customers.....	<u>\$122,500</u>

Appendix 2 BE 13–8

Cost of goods sold.....	\$240,000
Increase in inventories.....	19,200
Increase in accounts payable.....	<u>(12,000)</u>
Cash paid for merchandise.....	<u>\$247,200</u>

EXERCISES**Ex. 13–1**

There were net additions to the net loss reported on the income statement to convert the net loss from the accrual basis to the cash basis. For example, depreciation is an expense in determining net income, but it does not result in a cash outflow. Thus, depreciation is added back to the net loss in order to determine net cash flow from operations. A second large item that is added to the net loss is the increase in advanced ticket sales of \$246 million. This represents an increase in unused, but paid, tickets (unearned revenue) between the two balance sheet dates. This is a significant item that is largely unique to the airline industry.

The cash flows from operating activities detail is provided as follows for class discussion:

United Continental Holdings, Inc. Cash Flows from Operating Activities (Selected from Statement of Cash Flows) (in millions)	
Cash flows from operating activities:	
Net income (loss)	\$ (723)
Adjustments to reconcile net income (loss) to net cash flow	
provided by operating activities:	
Depreciation and amortization	1,522
Special charges	389
Debt and lease discount amortization	(247)
Share based compensation	14
Other, net	251
Changes in certain assets and liabilities:	
Decrease (increase) in accounts receivable	(21)
Decrease (increase) in other assets	(484)
Increase (decrease) in accounts payable	285
Increase (decrease) in advanced ticket sales	246
Increase (decrease) in frequent flyer deferred revenue	(712)
Increase (decrease) in other liabilities	415
Net cash flows from (used for) operating activities	\$ 935

Ex. 13-2

- | | |
|-----------------------------------|-------------------------------------|
| A. Cash payment, \$411,000 | E. Cash payment, \$50,000 |
| B. Cash receipt, \$440,000 | F. Cash receipt, \$490,000 |
| C. Cash receipt, \$60,000 | G. Cash payment, \$332,500 |
| D. Cash payment, \$650,000 | H. Cash payment, \$1,320,000 |

Ex. 13-3

- | | |
|---------------------|---------------------|
| A. operating | G. financing |
| B. financing | H. investing |
| C. financing | I. financing |
| D. financing | J. investing |
| E. financing | K. investing |
| F. investing | |

Ex. 13-4

- | | |
|--------------------|--------------------|
| A. added | G. added |
| B. deducted | H. added |
| C. added | I. added |
| D. added | J. added |
| E. added | K. deducted |
| F. added | |

Ex. 13–5

A. Net income.....	\$73,600	
Adjustments to reconcile net income to net cash		
flow from operating activities:		
Depreciation.....	27,400	
Changes in current operating assets and liabilities:		
Increase in accounts receivable.....	(8,000)	
Decrease in inventories.....	4,500	
Decrease in prepaid expenses.....	2,250	
Increase in accounts payable.....	5,000	
Decrease in wages payable.....	<u>(900)</u>	
Net cash flow from operating activities.....		\$103,850

- B. Cash flows from operating activities shows the cash inflow or outflow from a company's day-to-day operations. Net income reports the excess of revenues over expenses for a company using the accrual basis of accounting. Revenues are recorded when they are earned, not necessarily when cash is received. Expenses are recorded when they are incurred and matched against revenue, not necessarily when cash is paid. As a result, the cash flows from operating activities differs from net income because it does not use the accrual basis of accounting.**

Ex. 13–6**A. Cash flows from operating activities:**

Net income.....	\$185,000	
Adjustments to reconcile net income to net cash		
flow from operating activities:		
Depreciation.....	96,000	
Changes in current operating assets and liabilities:		
Decrease in accounts receivable.....	5,450	
Increase in inventories.....	(11,200)	
Decrease in prepaid expenses.....	900	
Decrease in accounts payable.....	(18,500)	
Increase in salaries payable.....	<u>3,200</u>	
Net cash flow from operating activities.....		\$260,850

- B. Yes. The amount of cash flows from operating activities reported on the statement of cash flows is not affected by the method of reporting such flows.**

Ex. 13–7

A. Cash flows from operating activities:

Net income.....	\$508,000	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation.....	57,600	
Gain on disposal of equipment.....	(33,600)	
Changes in current operating assets and liabilities:		
Increase in accounts receivable.....	(8,960)	
Decrease in inventory.....	5,120	
Decrease in prepaid insurance.....	1,920	
Decrease in accounts payable.....	(6,080)	
Increase in income taxes payable.....	<u>1,410</u>	
Net cash flow from operating activities.....		\$525,410

Note: The change in dividends payable would be used to adjust the dividends declared in obtaining the cash paid for dividends in the Financing Activities section of the statement of cash flows.

- B. Cash flows from operating activities reports the cash inflow or outflow from a company's day-to-day operations. Net income reports the excess of revenues over expenses for a company using the accrual basis of accounting. Revenues are recorded when they are earned, not necessarily when cash is received. Expenses are recorded when they are incurred and matched against revenue, not necessarily when cash is paid. As a result, the cash flows from operating activities differs from net income because it does not use the accrual basis of accounting.**

Ex. 13–8

Cash flows from investing activities:

Cash received from sale of equipment.....	\$101,250
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The loss on the sale, \$16,875 (\$101,250 proceeds from sale less \$118,125 book value), would be added to net income in determining the cash flows from operating activities if the indirect method of reporting cash flows from operations is used.

Ex. 13–9

Cash flows from investing activities:

Cash received from sale of equipment.....	\$37,200
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The loss on the sale, \$6,800 (\$37,200 proceeds from sale less \$44,000 book value), would be added to net income in determining the cash flows from operating activities if the indirect method of reporting cash flows from operations is used.

Ex. 13–10**Cash flows from investing activities:**

Cash received from sale of land.....	\$ 95,550
Cash paid for purchase of land.....	(104,300)

The gain on the sale of land, \$31,710, would be deducted from net income in determining the cash flows from operating activities if the indirect method of reporting cash flows from operations is used.

Ex. 13–11

Dividends declared.....	\$1,200,000
Decrease in dividends payable.....	<u>150,000</u>
Dividends paid to stockholders during the year.....	<u>\$1,350,000</u>

Ex. 13–12**Cash flows from financing activities:**

Cash received from sale of common stock.....	\$1,920,000
Cash paid for dividends.....	(315,000)

Note: The stock dividend is not disclosed on the statement of cash flows.

Ex. 13–13**Cash flows from investing activities:**

Cash paid for purchase of land.....	\$(246,000)
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A separate schedule of noncash investing and financing activities would report the purchase of \$324,000 land with a long-term mortgage note, as follows:

Purchase of land by issuing long-term mortgage note.....	\$324,000
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Ex. 13–14**Cash flows from financing activities:**

Cash received from issuing bonds payable.....	\$ 420,000
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Cash paid to redeem bonds payable.....	(138,000)
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Note: The discount amortization of \$2,625 would be shown as an adjusting item (increase) in the Cash Flows from Operating Activities section under the indirect method.

Ex. 13–15

A. Net cash flow from operating activities.....		\$357,500
Increase in accounts receivable.....	\$ 14,300	
Increase in prepaid expenses.....	2,970	
Decrease in income taxes payable.....	7,700	
Gain on sale of investments	<u>13,200</u>	<u>38,170</u>
		\$395,670
Depreciation.....	\$(29,480)	
Decrease in inventories.....	(19,140)	
Increase in accounts payable.....	<u>(5,280)</u>	<u>(53,900)</u>
Net income, per income statement.....		<u><u>\$341,770</u></u>

Note to Instructors: The net income must be determined by working backward through the Cash Flows from Operating Activities section of the statement of cash flows. Hence, those items that were added (deducted) to determine net cash flow from operating activities must be deducted (added) to determine net income.

Ex. 13–15 (Concluded)**B. Curwen's net income differed from cash flows from operations because of:**

- \$29,480 of depreciation expense which has no effect on cash flows from operating activities,
- a \$13,200 gain on the sale of investments. The proceeds from this sale, which include the gain, are reported in the Investing Activities section of the statement of cash flows.
- Changes in current operating assets and liabilities that are added or deducted, depending on their effect on cash flows:

Increase in accounts receivable, \$14,300
 Increase in prepaid expenses, \$2,970
 Decrease in income taxes payable, \$7,700
 Decrease in inventories, \$19,140
 Increase in accounts payable, \$5,280

Ex. 13–16**A.**

National Beverage Co. Cash Flows from Operating Activities (in thousands)		
Cash flows from operating activities:		
Net income	\$49,311	
Adjustments to reconcile net loss to net cash flow from operating activities:		
Depreciation	11,580	
Gain on disposal of property	(1,188)	
Other items involving noncash expenses	1,383	
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(1,746)	
Decrease in inventory	990	
Increase in prepaid expenses	(605)	
Decrease in accounts payable	(710)	
Decrease in accrued and other current liabilities	(995)	
Net cash flow from operating activities		\$58,020

- B. National Beverage is doing well financially. The company has positive earnings and positive net cash flow from operating activities. The company continues to grow, and the trend in recent years has been positive. The increase in accounts receivable is a positive sign, indicating an increase in sales.**

Ex. 13-17

A.

Olson-Jones Industries, Inc. Statement of Cash Flows For the Year Ended December 31, 20Y2		
Cash flows from operating activities:		
Net income	\$ 62	
Adjustments to reconcile net income to net cash flow from operating activities:		
Depreciation	26	
Gain on sale of land	(40)	
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(6)	
Increase in inventories	(18)	
Increase in accounts payable	14	
Net cash flow from operating activities		\$ 38
Cash flows from investing activities:		
Cash received from sale of land	\$120	
Cash paid for purchase of equipment	(30)	
Net cash flow from investing activities		90
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 60	
Cash paid for dividends*	(19)	
Net cash flow from financing activities		41
Change in cash		\$169
Cash at the beginning of the year		14
Cash at the end of the year		\$183

* Dividends = \$24 – \$5 = \$19

B. Olson-Jones Industries Inc.'s net income was more than the cash flows from operations because of:

- \$26 of depreciation expense, which has no effect on cash.
- A \$40 gain on the sale of land. The proceeds from this sale of \$120, which include the gain, are reported in the Investing Activities section of the statement of cash flows.
- Changes in current operating assets and liabilities that are added or deducted, depending on their effect on cash flows:
 - Increase in accounts receivable, \$6 deducted
 - Increase in inventories, \$18 deducted
 - Increase in accounts payable, \$14 added

Ex. 13–18

- 1. The increase in accounts receivable should be deducted from net income in the Cash Flows from Operating Activities section.**
- 2. The gain on the sale of investments should be deducted from net income in the Cash Flows from Operating Activities section.**
- 3. The increase in accounts payable should be added to net income in the Cash Flows from Operating Activities section.**
- 4. The correct amount of cash at the beginning of the year, \$240,000, should be added to the increase in cash.**
- 5. The final amount should be the amount of cash at the end of the year, \$350,160.**
- 6. The final amount of net cash flow from operating activities is \$381,360.**

Ex. 13–18 (Concluded)

A correct statement of cash flows would be as follows:

Shasta Inc. Statement of Cash Flows For the Year Ended December 31, 20Y9			
Cash flows from operating activities:			
Net income		\$ 360,000	
Adjustments to reconcile net income to			
net cash flow from operating activities:			
Depreciation		100,800	
Gain on sale of investments		(17,280)	
Changes in current operating assets			
and liabilities:			
Increase in accounts receivable		(27,360)	
Increase in inventories		(36,000)	
Increase in accounts payable		3,600	
Decrease in accrued expenses			
payable		(2,400)	
Net cash flow from operating activities			\$ 381,360
Cash flows from investing activities:			
Cash received from sale of investments		\$ 240,000	
Cash paid for purchase of land		(259,200)	
Cash paid for purchase of equip.		(432,000)	
Net cash flow used for investing activities			(451,200)
Cash flows from financing activities:			
Cash received from sale of common stock		\$ 312,000	
Cash paid for dividends		(132,000)	
Net cash flow from financing activities			180,000
Change in cash			\$ 110,160
Cash at the beginning of the year			240,000
Cash at the end of the year			\$ 350,160

Appendix 2 Ex. 13–19

A. Sales.....	\$753,500
Decrease in accounts receivable balance.....	<u>48,400</u>
Cash received from customers.....	<u>\$801,900</u>
B. Income tax expense.....	\$ 50,600
Decrease in income tax payable.....	<u>5,500</u>
Cash payments for income taxes.....	<u>\$ 56,100</u>
C. Because the customers paid more than the amount of sales for the period, cash received from customers exceeded sales made on account by \$48,400 during the current year.	

Appendix 2 Ex. 13–20

A. Cost of goods sold.....	\$1,031,550
Decrease in accounts payable.....	<u>9,660</u>
	\$1,041,210
Decrease in inventories.....	<u>(15,410)</u>
Cash payments for merchandise.....	<u>\$1,025,800</u>
B. Operating expenses other than depreciation.....	\$ 179,400
Decrease in accrued expenses payable.....	<u>1,380</u>
	\$ 180,780
Decrease in prepaid expenses.....	<u>(1,610)</u>
Cash payments for operating expenses.....	<u>\$ 179,170</u>

Appendix 2 Ex. 13–21

A. Cash flows from operating activities:

Cash received from customers.....	\$ 522,760 ¹	
Cash payments for merchandise.....	(302,400) ²	
Cash payments for operating expenses.....	(99,960) ³	
Cash payments for income taxes.....	<u>(24,360)⁴</u>	
Net cash flow from operating activities.....		\$ 96,040

Computations:

1. Sales.....	\$511,000
Decrease in accounts receivable.....	<u>11,760</u>
Cash received from customers.....	<u>\$522,760</u>
2. Cost of goods sold.....	\$290,500
Increase in inventories.....	3,920
Decrease in accounts payable.....	<u>7,980</u>
Cash payments for merchandise.....	<u>\$302,400</u>
3. Operating expenses other than depreciation.....	\$105,000
Decrease in prepaid expenses.....	(3,780)
Increase in accrued expenses payable.....	<u>(1,260)</u>
Cash payments for operating expenses.....	<u>\$ 99,960</u>
4. Income tax expense.....	\$ 21,700
Add decrease in income tax payable.....	<u>2,660</u>
Cash payments for income taxes.....	<u>\$ 24,360</u>

B. The *direct method* directly reports cash receipts and payments. The cash received less the cash payments is the net cash flow from operating activities. Individual cash receipts and payments are reported in the Cash Flows from Operating Activities section.

The *indirect method* adjusts accrual-basis net income for revenues and expenses that do not involve the receipt or payment of cash to arrive at cash flows from operating activities.

Appendix 2 Ex. 13–22**Cash flows from operating activities:**

Cash received from customers.....	\$ 440,440 ¹	
Cash payments for merchandise.....	(161,260) ²	
Cash payments for operating expenses.....	(115,720) ³	
Cash payments for income taxes.....	<u>(39,600)</u>	
Net cash flow from operating activities.....		\$123,860

Computations:

1. Sales.....	\$445,500	
Increase in accounts receivable.....	<u>(5,060)</u>	
Cash received from customers.....	<u>\$440,440</u>	
2. Cost of goods sold.....	\$154,000	
Increase in inventories.....	12,100	
Increase in accounts payable.....	<u>(4,840)</u>	
Cash payments for merchandise.....	<u>\$161,260</u>	
3. Operating expenses other than depreciation.....	\$115,280	
Decrease in accrued expenses payable.....	1,760	
Decrease in prepaid expenses.....	<u>(1,320)</u>	
Cash payments for operating expenses.....	<u>\$115,720</u>	

PROBLEMS**Prob. 13–1A**

Livers Inc. Statement of Cash Flows For the Year Ended December 31, 20Y3		
Cash flows from operating activities:		
Net income	\$ 500,000	
Adjustments to reconcile net income to		
net cash flow from operating activities:		
Depreciation	100,000	
Gain on sale of investments	(75,000)	
Changes in current operating assets		
and liabilities:		
Increase in accounts receivable	(50,000)	
Increase in inventories	(20,000)	
Increase in accounts payable	40,000	
Decrease in accrued expenses payable	(5,000)	
Net cash flow from operating activities		\$ 490,000
Cash flows from investing activities:		
Cash received from sale of investments	\$ 175,000	
Cash paid for purchase of land	(500,000)	
Cash paid for purchase of equipment	(200,000)	
Net cash flow used for investing activities		(525,000)
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 125,000	
Cash paid for dividends*	(85,000)	
Net cash flow from financing activities		40,000
Change in cash		\$ 5,000
Cash at the beginning of the year		150,000
Cash at the end of the year		\$ 155,000

* Cash paid for dividends = \$90,000 + \$25,000 – \$30,000 = \$85,000

Prob. 13–1A (Concluded)
(Optional)

Livers Inc. Spreadsheet (Work Sheet) for Statement of Cash Flows For the Year Ended December 31, 20Y3				
Account Title	Balance, Dec. 31, 20Y2	Transactions		Balance, Dec. 31, 20Y3
		Debit	Credit	
Cash	150,000	(m) 5,000		155,000
Accounts receivable (net)	400,000	(l) 50,000		450,000
Inventories	750,000	(k) 20,000		770,000
Investments	100,000		(j) 100,000	0
Land	0	(i) 500,000		500,000
Equipment	1,200,000	(h) 200,000		1,400,000
Accum. depr.—equipment	(500,000)		(g) 100,000	(600,000)
Accounts payable	(300,000)		(f) 40,000	(340,000)
Accrued expenses payable	(50,000)	(e) 5,000		(45,000)
Dividends payable	(25,000)		(d) 5,000	(30,000)
Common stock, \$4 par	(600,000)		(c) 100,000	(700,000)
Paid-in capital in excess of par—common stock	(175,000)		(c) 25,000	(200,000)
Retained earnings	(950,000)	(b) 90,000	(a) 500,000	(1,360,000)
Totals	0	870,000	870,000	0
Operating activities:				
Net income		(a) 500,000		
Depreciation		(g) 100,000		
Gain on sale of investments			(j) 75,000	
Increase in accounts receivable			(l) 50,000	
Increase in inventories			(k) 20,000	
Increase in accounts payable		(f) 40,000		
Decrease in accrued expenses payable			(e) 5,000	
Investing activities:				
Purchase of equipment			(h) 200,000	
Purchase of land			(i) 500,000	
Sale of investments		(j) 175,000		
Financing activities:				
Declaration of cash dividends			(b) 90,000	
Sale of common stock		(c) 125,000		
Increase in dividends payable		(d) 5,000		
Net change in cash			(m) 5,000	
Totals		945,000	945,000	

Note to Instructor: The letters in the debit and credit columns are included for reference purposes only.

Prob. 13-2A

Yellow Dog Enterprises Inc. Statement of Cash Flows For the Year Ended December 31, 20Y8		
Cash flows from operating activities:		
Net income	\$ 190,000	
Adjustments to reconcile net income to		
net cash flow from operating activities:		
Depreciation	115,000	
Changes in current operating assets		
and liabilities:		
Decrease in accounts receivable	25,000	
Increase in inventory	(110,000)	
Increase in prepaid expenses	(5,000)	
Increase in accounts payable	10,000	
Net cash flow from operating activities		\$ 225,000
Cash flows from investing activities:		
Cash paid for equipment	\$(395,000)	
Net cash flow used for investing activities		(395,000)
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 600,000	
Cash paid for dividends	(50,000)	
Cash paid to retire mortgage note payable	(400,000)	
Net cash flow used for financing activities		150,000
Change in cash		\$ (20,000)
Cash at the beginning of the year		100,000
Cash at the end of the year		\$ 80,000

Note to Instructors: The disposal of fully depreciated equipment is not included in the cash flow statement because there is no associated cash flow. This transaction strictly involves the removal of \$75,000 from the equipment and accumulated depreciation—equipment accounts.

Prob. 13–2A (Concluded)
(Optional)

Yellow Dog Enterprises Inc. Spreadsheet (Work Sheet) for Statement of Cash Flows For the Year Ended December 31, 20Y8				
Account Title	Balance, Dec. 31, 20Y7	Transactions		Balance, Dec. 31, 20Y8
		Debit	Credit	
Cash	100,000		(l) 20,000	80,000
Accounts receivable (net)	300,000		(k) 25,000	275,000
Merchandise inventory	400,000	(j) 110,000		510,000
Prepaid expenses	10,000	(i) 5,000		15,000
Equipment	750,000	(h) 395,000	(g) 75,000	1,070,000
Accum. depr.—equipment	(160,000)	(g) 75,000	(f) 115,000	(200,000)
Accounts payable	(90,000)		(e) 10,000	(100,000)
Mortgage note payable	(400,000)	(d) 400,000		0
Common stock, \$10 par	(200,000)		(c) 400,000	(600,000)
Paid-in capital in excess of par—common stock	(100,000)		(c) 200,000	(300,000)
Retained earnings	(610,000)	(b) 50,000	(a) 190,000	(750,000)
Totals	0	1,035,000	1,035,000	0
Operating activities:				
Net income		(a) 190,000		
Depreciation		(f) 115,000		
Decrease in accts. receivable		(k) 25,000		
Increase in merchandise inventory			(j) 110,000	
Increase in prepaid expenses			(i) 5,000	
Increase in accounts payable		(e) 10,000		
Investing activities:				
Purchase of equipment			(h) 395,000	
Financing activities:				
Payment of cash dividends			(b) 50,000	
Sale of common stock		(c) 600,000		
Payment of mortgage note payable			(d) 400,000	
Net decrease in cash		(l) 20,000		
Totals		960,000	960,000	

Note to Instructor: The letters in the debit and credit columns are included for reference purposes only.

Prob. 13–3A

Whitman Co. Statement of Cash Flows For the Year Ended December 31, 20Y2		
Cash flows from operating activities:		
Net loss	\$ (35,320)	
Adjustments to reconcile net loss to net cash flow from operating activities:		
Depreciation*	55,620	
Loss on sale of land**	12,600	
Changes in current operating assets and liabilities:		
Increase in accounts receivable	(66,960)	
Increase in inventories	(105,480)	
Decrease in prepaid expenses	5,760	
Decrease in accounts payable	(35,820)	
Net cash flow used for operating activities		\$(169,600)
Cash flows from investing activities:		
Cash received from land sold	\$ 151,200	
Cash paid for acquisition of building	(561,600)	
Cash paid for purchase of equipment	(104,400)	
Net cash flow used for investing activities		(514,800)
Cash flows from financing activities:		
Cash received from issuance of bonds payable	\$ 270,000	
Cash received from issuance of common stock	400,000	
Cash paid for dividends	(32,400)	
Net cash flow from financing activities		637,600
Change in cash		\$ (46,800)
Cash at the beginning of the year		964,800
Cash at the end of the year		\$ 918,000

* Depreciation = \$26,280 + \$29,340

** Loss on sale of land = \$151,200 – \$163,800

Prob. 13–3A (Concluded)
(Optional)

Whitman Co. Spreadsheet (Work Sheet) for Statement of Cash Flows For the Year Ended December 31, 20Y2				
Account Title	Balance, Dec. 31, 20Y1	Transactions		Balance, Dec. 31, 20Y2
		Debit	Credit	
Cash	964,800		(o) 46,800	918,000
Accounts receivable	761,940	(g) 66,960		828,900
Inventories	1,162,980	(h) 105,480		1,268,460
Prepaid expenses	35,100		(f) 5,760	29,340
Land	479,700		(l) 163,800	315,900
Buildings	900,900	(k) 561,600		1,462,500
Accum. depr.—buildings	(382,320)		(e) 26,280	(408,600)
Equipment	454,680	(i) 104,400	(j) 46,800	512,280
Accum. depr.—equipment	(158,760)	(j) 46,800	(d) 29,340	(141,300)
Accounts payable	(958,320)	(c) 35,820		(922,500)
Bonds payable	0		(m) 270,000	(270,000)
Common stock, \$25 par	(117,000)		(n) 200,000	(317,000)
Paid-in capital in excess of par—common stock	(558,000)		(n) 200,000	(758,000)
Retained earnings	(2,585,700)	(a) 35,320		(2,582,780)
		(b) (32,400)		
Totals	0	923,980	988,780	(64,800)
Operating activities:				
Net loss			(a) 35,320	
Depreciation—equipment		(d) 29,340		
Depreciation—buildings		(e) 26,280		
Loss on sale of land		(l) 12,600		
Increase in accts. receivable			(g) 66,960	
Increase in inventories			(h) 105,480	
Decrease in prepaid expenses		(f) 5,760		
Decrease in accounts payable			(c) 35,820	
Investing activities:				
Purchase of equipment			(i) 104,400	
Acquisition of building			(k) 561,600	
Sale of land		(l) 151,200		
Financing activities:				
Payment of cash dividends			(b) (32,400)	
Issuance of bonds payable		(m) 270,000		
Issuance of common stock		(n) 400,000		
Net decrease in cash		(o) 46,800		
Totals		941,980	877,180	

Appendix 2 Prob. 13–4A

Canace Products Inc. Statement of Cash Flows For the Year Ended December 31, 20Y6		
Cash flows from operating activities:		
Cash received from customers ¹	\$ 5,960,600	
Cash payments for merchandise ²	(2,456,800)	
Cash payments for operating expenses ³	(3,107,400)	
Cash payments for income taxes	(102,800)	
Net cash flow from operating activities		\$ 293,600
Cash flows from investing activities:		
Cash received from sale of investments	\$ 176,000	
Cash paid for purchase of land	(520,000)	
Cash paid for purchase of equipment	(200,000)	
Net cash flow used for investing activities		(544,000)
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 240,000	
Cash paid for dividends*	(25,600)	
Net cash flow from financing activities		214,400
Change in cash		\$ (36,000)
Cash at the beginning of the year		679,400
Cash at the end of the year		\$ 643,400

Reconciliation of Net Income with Cash Flows from Operating Activities:

Net income.....	\$217,200
Adjustments to reconcile net income to net cash flow from operating activities:	
Depreciation.....	44,000
Loss on sale of investments.....	64,000
Changes in current operating assets and liabilities:	
Increase in accounts receivable.....	(19,400)
Increase in inventories.....	(28,200)
Increase in accounts payable.....	23,400
Decrease in accrued expenses payable.....	(7,400)
Net cash flow from operating activities.....	<u>\$293,600</u>

* Dividends paid: \$28,000 + \$6,400 – \$8,800 = \$25,600

Appendix 2 Prob. 13–4A (Concluded)**Computations:**

1. Sales.....	\$5,980,000
Increase in accounts receivable.....	<u>(19,400)</u>
Cash received from customers.....	<u>\$5,999,400</u>
2. Cost of goods sold.....	\$2,452,000
Increase in inventories.....	28,200
Increase in accounts payable.....	<u>(23,400)</u>
Cash payments for merchandise.....	<u>\$2,456,800</u>
3. Operating expenses other than depreciation.....	\$3,100,000
Decrease in accrued expenses payable.....	<u>7,400</u>
Cash payments for operating expenses.....	<u>\$3,107,400</u>

Appendix 2 Prob. 13–5A

Livers Inc. Statement of Cash Flows For the Year Ended December 31, 20Y3		
Cash flows from operating activities:		
Cash received from customers ¹	\$ 2,950,000	
Cash payments for merchandise ²	(1,380,000)	
Cash payments for operating expenses ³	(955,000)	
Cash payments for income taxes	(125,000)	
Net cash flow from operating activities		\$ 490,000
Cash flows from investing activities:		
Cash received from sale of investments	\$ 175,000	
Cash paid for purchase of land	(500,000)	
Cash paid for purchase of equipment	(200,000)	
Net cash flow used for investing activities		(525,000)
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 125,000	
Cash paid for dividends ⁴	(85,000)	
Net cash flow from financing activities		40,000
Change in cash		\$ 5,000
Cash at the beginning of the year		150,000
Cash at the end of the year		\$ 155,000

Reconciliation of Net Income with Cash Flows from Operating Activities:

Net income.....	\$500,000
Adjustments to reconcile net income to net cash flow from operating activities:	
Depreciation.....	100,000
Gain on sale of investments.....	(75,000)
Changes in current operating assets and liabilities:	
Increase in accounts receivable.....	(50,000)
Increase in inventories.....	(20,000)
Increase in accounts payable.....	40,000
Decrease in accrued expenses payable.....	(5,000)
Net cash flow from operating activities.....	<u>\$490,000</u>

Appendix 2 Prob. 13–5A (Concluded)**Computations:**

1.	Sales.....	\$3,000,000
	Increase in accounts receivable.....	<u>(50,000)</u>
	Cash received from customers.....	<u>\$2,950,000</u>
2.	Cost of goods sold.....	\$1,400,000
	Increase in inventories.....	20,000
	Increase in accounts payable.....	<u>(40,000)</u>
	Cash payments for merchandise.....	<u>\$1,380,000</u>
3.	Operating expenses other than depreciation.....	\$ 950,000
	Decrease in accrued expenses payable.....	<u>5,000</u>
	Cash payments for operating expenses.....	<u>\$ 955,000</u>
4.	Cash dividends declared.....	\$ 90,000
	Increase in dividends payable.....	<u>(5,000)</u>
	Cash payments for dividends.....	<u>\$ 85,000</u>

Prob. 13-1B

Merrick Equipment Co. Statement of Cash Flows For the Year Ended December 31, 20Y9		
Cash flows from operating activities:		
Net income	\$ 141,680	
Adjustments to reconcile net income to		
net cash flow from operating activities:		
Depreciation	14,790	
Loss on sale of investments	10,200	
Changes in current operating assets		
and liabilities:		
Increase in accounts receivable	(19,040)	
Increase in inventories	(8,670)	
Increase in accounts payable	11,560	
Increase in accrued expenses		
payable	3,740	
Net cash flow from operating activities		\$ 154,260
Cash flows from investing activities:		
Cash received from sale of investments	\$ 91,800	
Cash paid for purchase of land	(295,800)	
Cash paid for purchase of equipment	(80,580)	
Net cash flow used for investing activities		(284,580)
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 250,000	
Cash paid for dividends*	(96,900)	
Net cash flow from financing activities		153,100
Change in cash		\$ 22,780
Cash at the beginning of the year		47,940
Cash at the end of the year		\$ 70,720

* $\$102,000 + \$20,400 - \$25,500 = \$96,900$

Prob. 13–1B (Concluded)
(Optional)

Merrick Equipment Co. Spreadsheet (Work Sheet) for Statement of Cash Flows For the Year Ended December 31, 20Y9				
Account Title	Balance, Dec. 31, 20Y8	Transactions		Balance, Dec. 31, 20Y9
		Debit	Credit	
Cash	47,940	(m) 22,780		70,720
Accounts receivable (net)	188,190	(l) 19,040		207,230
Inventories	289,850	(k) 8,670		298,520
Investments	102,000		(j) 102,000	0
Land	0	(i) 295,800		295,800
Equipment	358,020	(h) 80,580		438,600
Accum. depr.—equipment	(84,320)		(g) 14,790	(99,110)
Accounts payable	(194,140)		(f) 11,560	(205,700)
Accrued expenses payable	(26,860)		(e) 3,740	(30,600)
Dividends payable	(20,400)		(d) 5,100	(25,500)
Common stock, \$1 par	(102,000)		(c) 100,000	(202,000)
Paid-in capital in excess of par—common stock	(204,000)		(c) 150,000	(354,000)
Retained earnings	(354,280)	(b) 102,000	(a) 141,680	(393,960)
Totals	0	528,870	528,870	0
Operating activities:				
Net income		(a) 141,680		
Depreciation		(g) 14,790		
Loss on sale of investments		(j) 10,200		
Increase in accounts receivable			(l) 19,040	
Increase in inventories			(k) 8,670	
Increase in accounts payable		(f) 11,560		
Increase in accrued expenses payable		(e) 3,740		
Investing activities:				
Purchase of equipment			(h) 80,580	
Purchase of land			(i) 295,800	
Sale of investments		(j) 91,800		
Financing activities:				
Declaration of cash dividends			(b) 102,000	
Sale of common stock		(c) 250,000		
Increase in dividends payable		(d) 5,100		
Net change in cash			(m) 22,780	
Totals		528,870	528,870	

Note to Instructor: The letters in the debit and credit columns are included for reference purposes only.

Prob. 13-2B

Harris Industries Inc. Statement of Cash Flows For the Year Ended December 31, 20Y4		
Cash flows from operating activities:		
Net income	\$ 524,580	
Adjustments to reconcile net income to		
net cash flow from operating activities:		
Depreciation	74,340	
Patent amortization	5,040	
Changes in current operating assets		
and liabilities:		
Increase in accounts receivable	(73,080)	
Decrease in inventories	134,680	
Increase in prepaid expenses	(6,440)	
Decrease in accounts payable	(89,600)	
Decrease in salaries payable	(8,120)	
Net cash flow from operating activities		\$ 561,400
Cash flows from investing activities:		
Cash paid for construction of building	\$(579,600)	
Net cash flow used for investing activities		(579,600)
Cash flows from financing activities:		
Cash received from issuance of mortgage note	\$ 224,000	
Cash paid for dividends*	(123,480)	
Net cash flow from financing activities		100,520
Change in cash		\$ 82,320
Cash at the beginning of the year		360,920
Cash at the end of the year		\$ 443,240
Schedule of Noncash Financing and Investing Activities:		
Issuance of common stock to retire bonds		\$ 390,000

* Cash paid for dividends = \$131,040 + \$25,200 – \$32,760 = \$123,480

Prob. 13–2B (Continued)
(Optional)

Harris Industries Inc. Spreadsheet (Work Sheet) for Statement of Cash Flows For the Year Ended December 31, 20Y4				
Account Title	Balance, Dec. 31, 20Y3	Transactions		Balance, Dec. 31, 20Y4
		Debit	Credit	
Cash	360,920	(p) 82,320		443,240
Accounts receivable (net)	592,200	(o) 73,080		665,280
Inventories	1,022,560		(n) 134,680	887,880
Prepaid expenses	25,200	(m) 6,440		31,640
Land	302,400			302,400
Buildings	1,134,000	(l) 579,600		1,713,600
Accum. depr.—buildings	(414,540)		(k) 51,660	(466,200)
Machinery and equipment	781,200			781,200
Accum. depr.—machinery and equipment	(191,520)		(j) 22,680	(214,200)
Patents	112,000		(i) 5,040	106,960
Accounts payable	(927,080)	(h) 89,600		(837,480)
Dividends payable	(25,200)		(g) 7,560	(32,760)
Salaries payable	(87,080)	(f) 8,120		(78,960)
Mortgage note payable	0		(e) 224,000	(224,000)
Bonds payable	(390,000)	(d) 390,000		0
Common stock, \$5 par	(50,400)		(c) 150,000	(200,400)
Paid-in capital in excess of par—common stock	(126,000)		(c) 240,000	(366,000)
Retained earnings	(2,118,660)	(b) 131,040	(a) 524,580	(2,512,200)
Totals	0	1,360,200	1,360,200	0

Note to Instructor: The letters in the debit and credit columns are included for reference purposes only.

Prob. 13–2B (Concluded)

Harris Industries Inc. Spreadsheet (Work Sheet) for Statement of Cash Flows For the Year Ended December 31, 20Y4				
Account Title	Balance, Dec. 31, 20Y3	Transactions		Balance, Dec. 31, 20Y4
		Debit	Credit	
Operating activities:				
Net income		(a) 524,580		
Depreciation—buildings		(k) 51,660		
Depreciation—machinery and equipment		(j) 22,680		
Amortization of patents		(i) 5,040		
Increase in accounts receivable			(o) 73,080	
Decrease in inventories		(n) 134,680		
Increase in prepaid expenses			(m) 6,440	
Decrease in accounts payable			(h) 89,600	
Decrease in salaries payable			(f) 8,120	
Investing activities:				
Construction of building			(l) 579,600	
Financial activities:				
Declaration of cash dividends			(b) 131,040	
Issuance of mortgage note payable		(e) 224,000		
Increase in dividends payable		(g) 7,560		
Schedule of noncash investing and financing activities:				
Issuance of common stock to retire bonds		(c) 390,000	(d) 390,000	
Net change in cash			(p) 82,320	
Totals		1,360,200	1,360,200	

Prob. 13–3B

Coulson Inc. Statement of Cash Flows For the Year Ended December 31, 20Y2		
Cash flows from operating activities:		
Net income	\$ 326,600	
Adjustments to reconcile net income to		
net cash flow from operating activities:		
Depreciation	68,400	
Gain on sale of land	(60,000)	
Changes in current operating assets		
and liabilities:		
Increase in accounts receivable	(94,800)	
Increase in inventories	(52,800)	
Decrease in prepaid expenses	7,800	
Decrease in accounts payable	(37,200)	
Increase in income taxes payable	4,800	
Net cash flow from operating activities		\$ 162,800
Cash flows from investing activities:		
Cash received from sale of land	\$ 456,000	
Cash paid for acquisition of building	(990,000)	
Cash paid for purchase of equipment	(196,800)	
Net cash flow used for investing activities		(730,800)
Cash flows from financing activities:		
Cash received from issuance of bonds payable	\$ 330,000	
Cash received from issuance of common stock	280,000	
Cash paid for dividends	(79,200)	
Net cash flow from financing activities		530,800
Change in cash		\$ (37,200)
Cash at the beginning of the year		337,800
Cash at the end of the year		\$ 300,600

Prob. 13–3B (Concluded)
(Optional)

Coulson Inc. Spreadsheet (Work Sheet) for Statement of Cash Flows For the Year Ended December 31, 20Y2				
Account Title	Balance, Dec. 31, 20Y1	Transactions		Balance, Dec. 31, 20Y2
		Debit	Credit	
Cash	337,800		(p) 37,200	300,600
Accounts receivable (net)	609,600	(i) 94,800		704,400
Inventories	865,800	(h) 52,800		918,600
Prepaid expenses	26,400		(g) 7,800	18,600
Land	1,386,000		(m) 396,000	990,000
Buildings	990,000	(l) 990,000		1,980,000
Accum. depr.—buildings	(366,000)		(f) 31,200	(397,200)
Equipment	529,800	(j) 196,800	(k) 66,000	660,600
Accum. depr.—equipment	(162,000)	(k) 66,000	(e) 37,200	(133,200)
Accounts payable	(631,200)	(d) 37,200		(594,000)
Income taxes payable	(21,600)		(c) 4,800	(26,400)
Bonds payable	0		(n) 330,000	(330,000)
Common stock, \$20 par	(180,000)		(o) 140,000	(320,000)
Paid-in capital in excess of par—common stock	(810,000)		(o) 140,000	(950,000)
Retained earnings	(2,574,600)	(b) 79,200	(a) 326,600	(2,822,000)
Totals	0	1,516,800	1,516,800	0
Operating activities:				
Net income		(a) 326,600		
Depreciation—equipment		(e) 37,200		
Depreciation—buildings		(f) 31,200		
Gain on sale of land			(m) 60,000	
Increase in accts. receivable			(i) 94,800	
Increase in inventories			(h) 52,800	
Decrease in prepaid expenses		(g) 7,800		
Decrease in accounts payable			(d) 37,200	
Increase in income taxes payable		(c) 4,800		
Investing activities:				
Purchase of equipment			(j) 196,800	
Acquisition of building			(l) 990,000	
Sale of land		(m) 456,000		
Financing activities:				
Payment of cash dividends			(b) 79,200	
Issuance of bonds payable		(n) 330,000		
Issuance of common stock		(o) 280,000		
Net decrease in cash		(p) 37,200		
Totals		1,510,800	1,510,800	

Appendix 2 Prob. 13–4B

Martinez Inc. Statement of Cash Flows For the Year Ended December 31, 20Y4		
Cash flows from operating activities:		
Cash received from customers ¹	\$ 4,433,760	
Cash payments for merchandise ²	(2,269,200)	
Cash payments for operating expenses ³	(1,356,240)	
Cash payments for income tax	(299,100)	
Net cash flow from operating activities		\$ 509,220
Cash flows from investing activities:		
Cash received from sale of investments	\$ 588,000	
Cash paid for land	(960,000)	
Cash paid for equipment	(240,000)	
Net cash flow used for investing activities		(612,000)
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 600,000	
Cash paid for dividends*	(518,400)	
Net cash flow from financing activities		81,600
Increase in cash		\$ (21,180)
Cash at the beginning of the year		683,100
Cash at the end of the year		\$ 661,920

Reconciliation of Net Income with Cash Flows from Operating Activities:

Net income.....	\$ 558,960
Adjustments to reconcile net income to net cash flow from operating activities:	
Depreciation expense.....	113,100
Gain on sale of investments.....	(156,000)
Changes in current operating assets and liabilities:	
Increase in accounts receivable.....	(78,240)
Increase in inventories.....	(30,600)
Increase in accounts payable.....	113,400
Decrease in accrued expenses payable.....	(11,400)
Net cash flow from operating activities.....	<u>\$ 509,220</u>

* Dividends paid: \$528,000 + \$91,200 – \$100,800 = \$518,400

Appendix 2 Prob. 13–4B (Concluded)**Computations:**

1. Sales.....	\$4,512,000
Increase in accounts receivable.....	<u>(78,240)</u>
Cash received from customers.....	<u>\$4,433,760</u>
2. Cost of goods sold.....	\$2,352,000
Increase in inventories.....	30,600
Increase in accounts payable.....	<u>(113,400)</u>
Cash payments for merchandise.....	<u>\$2,269,200</u>
3. Operating expenses other than depreciation.....	\$1,344,840
Decrease in accrued expenses payable.....	<u>11,400</u>
Cash payments for operating expenses.....	<u>\$1,356,240</u>

Appendix 2 Prob. 13–5B

Merrick Equipment Co. Statement of Cash Flows For the Year Ended December 31, 20Y9		
Cash flows from operating activities:		
Cash received from customers ¹	\$ 2,004,858	
Cash payments for merchandise ²	(1,242,586)	
Cash payments for operating expenses ³	(513,559)	
Cash payments for income taxes	(94,453)	
Net cash flow from operating activities		\$ 154,260
Cash flows from investing activities:		
Cash received from sale of investments	\$ 91,800	
Cash paid for purchase of land	(295,800)	
Cash paid for purchase of equipment	(80,580)	
Net cash flow used for investing activities		(284,580)
Cash flows from financing activities:		
Cash received from sale of common stock	\$ 250,000	
Cash paid for dividends*	(96,900)	
Net cash flow from financing activities		153,100
Change in cash		\$ 22,780
Cash at the beginning of the year		47,940
Cash at the end of the year		\$ 70,720

Reconciliation of Net Income with Cash Flows from Operating Activities:

Net income.....	\$141,680
Adjustments to reconcile net income to net cash flow from operating activities:	
Depreciation.....	14,790
Loss on sale of investments.....	10,200
Changes in current operating assets and liabilities:	
Increase in accounts receivable.....	(19,040)
Increase in inventories.....	(8,670)
Increase in accounts payable.....	11,560
Increase in accrued expenses payable.....	3,740
Net cash flow from operating activities.....	<u>\$154,260</u>

* Dividends paid: \$102,000 + \$20,400 – \$25,500 = \$96,900

Appendix 2 Prob. 13–5B (Concluded)**Computations:**

1. Sales.....	\$2,023,898
Increase in accounts receivable.....	<u>(19,040)</u>
Cash received from customers.....	<u>\$2,004,858</u>
2. Cost of goods sold.....	\$1,245,476
Increase in inventories.....	8,670
Increase in accounts payable.....	<u>(11,560)</u>
Cash payments for merchandise.....	<u>\$1,242,586</u>
3. Operating expenses other than depreciation.....	\$ 517,299
Increase in accrued expenses payable.....	<u>(3,740)</u>
Cash payments for operating expenses.....	<u>\$ 513,559</u>

ANALYSIS FOR DECISION MAKING**ADM-1****A.**

	Amazon	Best Buy	Walmart
Cash flows from operating activities	\$ 6,842	\$1,935	\$ 28,564
Cash used to purchase property, plant, and equipment	<u>(4,893)</u>	<u>(561)</u>	<u>(12,174)</u>
Free cash flow	<u>\$ 1,949</u>	<u>\$1,374</u>	<u>\$ 16,390</u>

B.

	Amazon	Best Buy	Walmart
Ratio of free cash flow to sales	2.2%	3.4%	3.4%
	$(\$1,949 \div \$88,988)$	$(\$1,374 \div \$40,339)$	$(\$16,390 \div \$485,651)$

- C. Amazon's free cash flow is \$1,949 million, which is slightly higher than Best Buy and much lower than Walmart. However, these companies vary greatly in size; thus, comparing absolute free cash flow across these companies is not very meaningful. A relative measure that can be used to compare free cash flow across the three companies is the ratio of free cash flow to sales. Using this measure, it can be seen that Amazon is weaker at generating free cash flow from sales than are Best Buy and Walmart. Amazon generates free cash flow equal to 2.2% of sales, while Best Buy and Walmart each generate free cash flow equal to 3.4% of sales.

ADM-2**A.**

	Year 3	Year 2	Year 1
Cash flows from operating activities	\$ 36	\$ (43)	\$218
Cash used to purchase property, plant, and equipment	<u>(42)</u>	<u>(68)</u>	<u>(82)</u>
Free cash flow	<u>\$ (6)</u>	<u>\$(111)</u>	<u>\$136</u>

B.

	Year 3	Year 2	Year 1
Ratio of free cash flow to sales	-0.2%	-2.9%	3.4%
	$[\$(6) \div \$3,434]$	$[\$(111) \div \$3,831]$	$[\$136 \div \$4,032]$

The free cash flow information does accurately show the financial stress on RadioShack. Free cash flow and ratio of free cash flow to sales were negative in the most recent two years prior to bankruptcy. Moreover, the amount of cash used to purchase property, plant, and equipment declined across the three years. Thus, the free cash flow would have been even more negative if the purchases on property, plant, and equipment had remained at the Year 1 levels. It appears that RadioShack

ADM-2 (Concluded)

attempted to save cash by reducing property, plant, and equipment purchases. Lastly, the sales levels were declining across the three years. This is considered an unfavorable trend.

ADM-3

- A. Total revenue is a good measure for assessing the relative size of the two companies. AT&T is clearly the larger company, with more than ten times the revenue of Facebook ($\$132,447 \div \$12,466$) in Year 3. While total assets are not provided, AT&T is also much larger than Facebook by this measure as well (more than seven times as large).
- B. Total revenue growth is measured horizontally for each company using Year 1 as the base year as follows:

	Year 3	Year 2	Year 1
AT&T	104%	101%	100%
Facebook	245%	155%	100%

AT&T

$$104\% = \$132,447 \div \$127,434$$

$$101\% = \$128,752 \div \$127,434$$

Facebook

$$245\% = \$12,446 \div \$5,089$$

$$155\% = \$7,872 \div \$5,089$$

It is clear from this data that Facebook is growing much faster than AT&T. This is not surprising in that Facebook is a young company that is expanding services and regions. AT&T is a more mature company with less opportunity for service or regional expansion. In addition, Facebook is starting from a much smaller revenue base compared to AT&T. Fast growth is easier from a smaller base than a larger base of activity.

- C. Cash used to purchase PP&E as a percent of the cash flows from operating activities:

	Year 3	Year 2	Year 1
AT&T	68%	61%	50%
Facebook	34%	32%	77%

AT&T

$$68\% = \$21,433 \div \$31,338$$

$$61\% = \$21,228 \div \$34,796$$

$$50\% = \$19,728 \div \$39,176$$

Facebook

$$34\% = \$1,831 \div \$5,457$$

$$32\% = \$1,362 \div \$4,222$$

$$77\% = \$1,235 \div \$1,612$$

ADM-3 (Continued)

D. The data indicate that AT&T requires more cash to purchase PP&E than does Facebook. In Years 2 and 3, the percent of cash flows from operations that is used to purchase PP&E is nearly double that of Facebook. Year 1 is a start-up year for Facebook and not likely a good indicator of future performance. Across all three years, as Facebook grows, the cash used for PP&E as a percent of cash flows from operating activities is declining. In contrast, across these three years, AT&T's cash used for PP&E as a percent of cash flows from operating activities is increasing. The net impact of cash used to purchase PP&E on free cash flow is more negative for AT&T than it is for Facebook. This is because cash used to purchase PP&E is subtracted from cash flows from operating activities in determining free cash flow.

E.

AT&T free cash flow

	Year 3	Year 2	Year 1
Cash flows from operating activities	\$ 31,338	\$ 34,796	\$ 39,176
Cash used to purchase property, plant, and equipment	<u>(21,433)</u>	<u>(21,228)</u>	<u>(19,728)</u>
Free cash flow	<u>\$ 9,905</u>	<u>\$ 13,568</u>	<u>\$ 19,448</u>

Ratio of free cash flow to revenues:

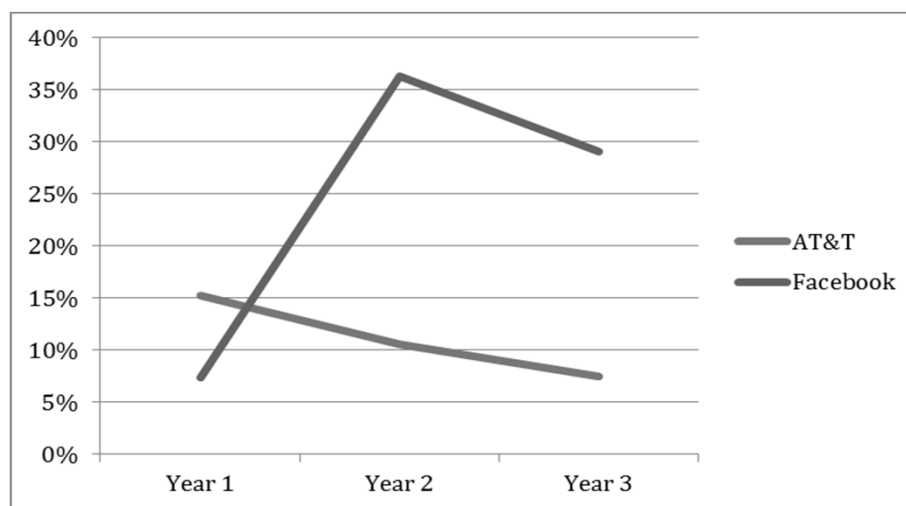
	Year 3	Year 2	Year 1
Ratio of free cash flow to revenues	7.5%	10.5%	15.3%
	(\$9,905 ÷ \$132,447)	(\$13,568 ÷ \$128,752)	(\$19,448 ÷ \$127,434)

Facebook free cash flow

	Year 3	Year 2	Year 1
Cash flows from operating activities	\$ 5,457	\$ 4,222	\$ 1,612
Cash used to purchase property, plant, and equipment	<u>(1,831)</u>	<u>(1,362)</u>	<u>(1,235)</u>
Free cash flow	<u>\$ 3,626</u>	<u>\$ 2,860</u>	<u>\$ 377</u>

Ratio of free cash flow to revenues:

	Year 3	Year 2	Year 1
Ratio of free cash flow to revenues	29.1%	36.3%	7.4%
	(\$3,626 ÷ \$12,466)	(\$2,860 ÷ \$7,872)	(\$377 ÷ \$5,089)

ADM-3 (Concluded)

- F. Facebook appears to have a better free cash flow position than does AT&T. In Years 2 and 3, Facebook's ratio of free cash flow to revenues is more than three times greater than AT&T's. The first year was a start-up year, so is not likely to be indicative of Facebook's free cash flow generating ability. Across the years, Facebook has significantly increased cash flows from operating activities. This is a major reason the ratio of free cash flows to revenues has increased. AT&T's ratio of free cash flows to revenues has steadily declined over these three years. This decline can be explained by the decline in cash flows from operating activities, while the cash needed to purchase PP&E has increased over the three years. The net result is a decline in the ratio.

ADM-4**A.**

Net change in cash:

	Year 3	Year 2	Year 1
Net cash provided by operating activities	\$ 2,914	\$ 2,301	\$ 1,786
Net cash used in investing activities	(2,349)	(2,162)	(1,563)
Net cash provided by (used in) financing activities	<u>1,429</u>	<u>(404)</u>	<u>669</u>
Net change in cash for the year	<u>\$ 1,994</u>	<u>\$ (265)</u>	<u>\$ 892</u>

B.

Free cash flow:

	Year 3	Year 2	Year 1
Net cash provided by operating activities	\$2,914	\$2,301	\$1,786
Additions to property, plant, and equipment	<u>(132)</u>	<u>(84)</u>	<u>(55)</u>
Free cash flow	<u>\$2,782</u>	<u>\$2,217</u>	<u>\$1,731</u>

ADM-4 (Concluded)

- C.** The free cash flow is more than \$2 billion in Years 2 and 3. Over the three-year period, free cash flow grew from \$1,731 million to \$2,782 million, or a 61% increase $[(\$2,782 - \$1,731) \div \$1,731]$. This is excellent free cash flow performance. The free cash flow has been used to make acquisitions and investments and repurchase common stock. The acquisitions and investments help grow the company and provide for flexibility for the future. The repurchase of common stock is a method of returning cash to stockholders.
- D.** The cash flow available for investment, dividends, debt repayments, and stock repurchases is best measured by the free cash flow. The change in cash for the period includes all of the sources and uses of cash, and thus does not say anything about the cash remaining for such uses.

TAKE IT FURTHER**TIF 13–1**

Although this situation might seem harmless at first, it is, in fact, a violation of generally accepted accounting principles. The operating cash flow per share figure should not be shown on the face of the income statement. The income statement is constructed under accrual accounting concepts, while operating cash flow “undoes” the accounting accruals. Thus, the inclusion of cash flow information on the income statement could be confusing to users. Some users might not be able to distinguish between earnings and operating cash flow per share—or how to interpret the difference. By agreeing with Polly, Lucas has breached his professional ethics because the disclosure would violate generally accepted accounting principles. On a more subtle note, Polly is being somewhat disingenuous. Apparently, Polly is not pleased with this year’s operating performance and would like to cover the earnings “bad news” with some “good cash flow news.” An interesting question is: Would Polly be as interested in the dual per-share disclosures in the opposite scenario—with earnings per share improving and cash flow per share deteriorating? Probably not.

TIF 13–2

A sample solution based on Nike Inc.'s Form 10-K for the fiscal year ended May 31, 2015, follows:

1.
 - A. \$4,680 million
 - B. \$(175) million
 - C. \$(2,790) million
 - D. \$1,632 million
2. The company has a very strong cash position, generating considerably more cash flows from operations than it requires for investing or financing activities.

TIF 13–3**Memo**

To: My Instructor
From: A+ Student
Re: Tidewater Inc. Financial Condition

Tidewater Inc. is a retailer that has been unprofitable in recent years. While the company has returned to profitability, there are several “red flags” indicating that the company's future prospects are highly uncertain. These red flags are discussed below:

- **The company has initiated a new marketing campaign that significantly increased the number of customers who are purchasing merchandise on credit using the company's branded credit card. This campaign significantly increased revenue and has helped the company return to profitability. However, it appears that the company has done a poor job of screening the creditworthiness of its new credit card customers. Increases in credit card purchases have resulted in a large accounts receivable balance. It is unlikely that the company will be able to collect a large portion of these accounts receivable, which will likely lead to a cash crisis.**
- **The purchases of deeply discounted merchandise appear to be backfiring. The company has received some “good deals” on price. However, the merchandise is only a “good deal” if the company can resell the merchandise at a profit. The large increase in inventory indicates that this is not the case. It appears that the merchandise has little customer appeal, and it is questionable whether the company will be able to sell the merchandise.**
- **The company has not been able to pay off its accounts payable in a timely manner, resulting in significant overdue accounts payable balances. While the company reports that most of the past-due payables have been paid, it is concerning that the company became overdue on its accounts payable. A retailer cannot afford a poor payment history, or it will be denied future merchandise shipments. This is a signal of a severe cash flow problem.**

These red flags suggest that the company is having severe operating cash flow difficulties, and the company's future prospects are highly uncertain.