Chapter 15
"How Well Am I Doing?" Statement of Cash Flows

Solutions to Questions

15-1 The statement of cash flows highlights the major activities that have provided and used cash during a period and shows their effects on the overall cash balance.

15-2 Cash equivalents are short-term, highly liquid investments such as Treasury bills, commercial paper, and money market funds. They are included with cash because investments of this type are made solely for the purpose of generating a return on temporarily idle funds and they can be easily converted to cash.

15-3 (1) Operating activities: Transactions that affect current assets, current liabilities, or net income.

(2) Investing activities: Transactions that involve the acquisition or disposition of noncurrent assets.

(3) Financing activities: Transactions (other than the payment of interest) involving borrowing from creditors, and any transactions (involving the owners of a company.

15-4 Interest is included as an operating activity since it is part of net income. Financing activities are narrowly defined to include only the principal amount borrowed or repaid.

15-5 Since the entire proceeds from a sale of an asset (including any gain) appear as a cash inflow from investing activities, the gain must be deducted from net income to avoid double counting.

15-6 Transactions involving accounts payable are not considered to be financing activities because such transactions relate to a company's day-to-day operating activities rather than to its financing activities.

15-7 The repayment of $300,000 and the borrowing of $500,000 must both be shown "gross" on the statement of cash flows. That is, the company would show $500,000 of cash provided by financing activities and then show $300,000 of cash used by financing activities.

15-8 The direct method reconstructs the income statement on a cash basis by restating revenues and expenses in terms of cash inflows and outflows. The indirect method starts with net income and adjusts it to a cash basis to determine the cash provided by operating activities.

15-9 Depreciation is not really a source of cash, even though it is listed as a "source" on the statement of cash flows. Adding back depreciation charges to net income to compute the amount of cash provided by operating activities creates the *illusion* that depreciation is a source of cash. It isn't. Charges to the accumulated depreciation account are added back to net income since they are equivalent to a decrease in an asset account. [See Exhibit 15-2.]

15-10 An increase in the Accounts Receivable account must be deducted from net income under the indirect method because this is an increase in a noncash asset.

15-11 A decrease in the Accounts Payable account must be added to cost of goods sold under the direct method. The cost of goods sold is increased by the amount of the decrease in accounts payable. Because the cost of goods sold is increased, the net cash flow provided by operating activities is decreased. Note that this is how a change in a liability should be handled according to Exhibit 15-2. The effect of a decrease in a liability is a decrease in cash.

15-12 A sale of equipment for cash would be classified as an investing activity. Any transaction involving the acquisition or disposition of noncurrent assets is classified as an investing activity.

15-13

Cost of goods sold..................	$250,000
Decrease in inventory.............	–15,000
Decrease in accounts payable	+10,000
Cost of goods sold adjusted to a cash basis..........................	$245,000

Exercise 15-1 (15 minutes)

Transaction	*Operating*	*Investing*	*Financing*	*Source*	*Use*
a. Short-term investment securities were purchased.	X				X
b. Equipment was purchased....................................		X			X
c. Accounts payable increased.................................	X			X	
d. Deferred taxes decreased....................................	X				X
e. Long-term bonds were issued..............................			X	X	
f. Common stock was sold.......................................			X	X	
g. A cash dividend was declared and paid................			X		X
h. Interest was paid to long-term creditors................	X				X
i. A long-term mortgage was entirely paid off...........			X		X
j. Inventories decreased..	X			X	
k. The company recorded net income of $1 million for the year..	X			X	
l. Depreciation charges totaled $200,000 for the year..	X			X	
m. Accounts receivable increased.............................	X				X

Exercise 15-2 (15 minutes)

Net income		$84,000
Adjustments to convert net income to a cash basis:		
Depreciation charges for the year	$50,000	
Increase in accounts receivable	(60,000)	
Increase in inventory	(77,000)	
Decrease in prepaid expenses	2,000	
Increase in accounts payable	30,000	
Decrease in accrued liabilities	(4,000)	
Increase in deferred income taxes	6,000	(53,000)
Net cash provided by operating activities		$31,000

Exercise 15-3 (15 minutes)

Sales	$1,000,000	
Adjustments to a cash basis:		
Less increase in accounts receivable	– 60,000	$940,000
Cost of goods sold	580,000	
Adjustments to a cash basis:		
Plus increase in inventory	+ 77,000	
Less increase in accounts payable	– 30,000	627,000
Selling and administrative expenses	300,000	
Adjustments to a cash basis:		
Less decrease in prepaid expenses	– 2,000	
Plus decrease in accrued liabilities	+ 4,000	
Less depreciation charges	– 50,000	252,000
Income taxes	36,000	
Adjustments to a cash basis:		
Less increase in deferred income taxes	– 6,000	30,000
Net cash provided by operating activities		$ 31,000

Note that the $31,000 agrees with the cash provided by operating activities figure under the indirect method in the previous exercise.

Exercise 15-4 (30 minutes)

Holly Company
Statement of Cash Flows
For the Year Ended December 31, 2008

Operating activities:		
Net income		$20
Adjustments to convert net income to a cash basis:		
Depreciation charges for the year	$10	
Increase in accounts receivable	(7)	
Increase in inventory	(14)	
Increase in accounts payable	6	(5)
Net cash provided by operating activities		15
Investing activities:		
Additions to plant and equipment	(30)	
Net cash used for investing activities		(30)
Financing activities:		
Increase in common stock	20	
Cash dividends	(8)	
Net cash provided by financing activities		12
Net decrease in cash		(3)
Cash, January 1, 2008		7
Cash, December 31, 2008		$ 4

Exercise 15-4 (continued)

While not a requirement, a worksheet may be helpful.

	Change	*Source or Use?*	*Cash Flow Effect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Assets (except cash and cash equivalents)						
Current assets:						
Accounts receivable...........	+7	Use	–7		–7	Operating
Inventory...........................	+14	Use	–14		–14	Operating
Noncurrent assets:						
Plant and equipment..........	+30	Use	–30		–30	Investing
Liabilities, Contra assets, and Stockholders' Equity						
Contra assets:						
Accumulated depreciation.	+10	Source	+10		+10	Operating
Current liabilities:						
Accounts payable.............	+6	Source	+6		+6	Operating
Stockholders' equity:						
Common stock..................	+20	Source	+20		+20	Financing
Retained earnings:						
Net income.....................	+20	Source	+20		+20	Operating
Dividends.......................	–8	Use	–8		–8	Financing
Additional entries						
None....................................						
Total.....................................			–3		–3	

Exercise 15-5 (15 minutes)

Sales..	$500	
Adjustments to a cash basis:		
Increase in accounts receivable............	–7	$493
Cost of goods sold....................................	300	
Adjustments to a cash basis:		
Increase in inventory..............................	+14	
Increase in accounts payable................	–6	308
Selling and administrative expenses..........	180	
Adjustments to a cash basis:		
Depreciation charges for the year..........	–10	170
Net cash provided by operating activities.…		$ 15

Exercise 15-6 (10 minutes)

Item	*Amount*	*Add*	*Deduct*
Accounts Receivable...................	$70,000 decrease	X	
Accrued Interest Receivable........	$6,000 increase		X
Inventory.....................................	$110,000 increase		X
Prepaid Expenses.......................	$3,000 decrease	X	
Accounts Payable........................	$40,000 decrease		X
Accrued Liabilities.......................	$9,000 increase	X	
Deferred Income Taxes Liability. .	$15,000 increase	X	
Sale of equipment.......................	$8,000 gain		X
Sale of long-term investments.....	$12,000 loss	X	

Exercise 15-7 (30 minutes)

1.

Net income		$75
Adjustments to convert net income to a cash basis:		
Depreciation charges	$40	
Decrease in accounts receivable	10	
Increase in inventory	(30)	
Decrease in prepaid expenses	5	
Increase in accounts payable	20	
Decrease in accrued liabilities	(10)	
Increase in taxes payable	10	
Increase in deferred taxes	5	
Loss on sale of long-term investments	5	
Gain on sale of land	(40)	15
Net cash provided by operating activities		$90

2.

Herald Company
Statement of Cash Flows

Operating activities:		
Net cash provided by operating activities (see above)		$ 90
Investing activities:		
Proceeds from sale of long-term investments	$ 45	
Proceeds from sale of land	70	
Additions to long-term investments	(20)	
Additions to plant & equipment	(150)	
Net cash used for investing activities		(55)
Financing activities:		
Decrease in bonds payable	(20)	
Increase in common stock	40	
Cash dividends	(35)	
Net cash used by financing activities		(15)
Net increase in cash (net cash flow)		20
Cash balance, beginning		100
Cash balance, ending		$120

Exercise 15-7 (continued)

While not a requirement, a worksheet may be helpful.

	Change	*Source or Use?*	*Cash Flow Ef-fect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Assets (except cash and cash equivalents)						
Current assets:						
Accounts receivable..........	–10	Source	+10		+10	Operating
Inventory..........................	+30	Use	–30		–30	Operating
Prepaid expenses............	–5	Source	+5		+5	Operating
Noncurrent assets:						
Long-term investments......	–30	Source	+30	–50	–20	Investing
Plant and equipment.........	+150	Use	–150		–150	Investing
Land................................	–30	Source	+30	–30	0	Investing
Liabilities, Contra assets, and Stockholders' Equity						
Contra assets:						
Accumulated depreciation.	+40	Source	+40		+40	Operating
Current liabilities:						
Accounts payable.............	+20	Source	+20		+20	Operating
Accrued liabilities.............	–10	Use	–10		–10	Operating
Taxes payable..................	+10	Source	+10		+10	Operating

Exercise 15-7 (continued)

	Change	*Source or Use?*	*Cash Flow Ef-fect*	*Ad-just-ment s*	*Adjusted Effect*	*Classi-fi-cation*
Noncurrent liabilities:						
Bonds payable..................	–20	Use	–20		–20	Financing
Deferred income taxes......	+5	Source	+5		+5	Operating
Stockholders' equity:						
Common stock..................	+40	Source	+40		+40	Financing
Retained earnings:						
Net income....................	+75	Source	+75		+75	Operating
Dividends......................	–35	Use	–35		–35	Financing
Additional entries						
Proceeds from sale of in-vestments........................				+45	+45	Investing
Loss on sale of investments				+5	+5	Operating
Proceeds from sale of land..				+70	+70	Investing
Gain on sale of land............				–40	–40	Operating
Total....................................			+20	0	+20	

Exercise 15-8 (15 minutes)

Sales	$600	
Adjustments to a cash basis:		
Decrease in accounts receivable	+10	$610
Cost of goods sold	250	
Adjustments to a cash basis:		
Increase in inventory	+30	
Increase in accounts payable	–20	260
Selling and administrative expenses	280	
Adjustments to a cash basis:		
Decrease in prepaid expenses	–5	
Decrease in accrued liabilities	+10	
Depreciation charges	–40	245
Income taxes	30	
Adjustments to a cash basis:		
Increase in taxes payable	–10	
Increase in deferred taxes	–5	15
Net cash provided by operating activities		$ 90

Problem 15-9 (20 minutes)

Transaction	Operating	Investing	Financing	Source, Use, or Neither	Reported in Separate Schedule?
a. Bonds were retired by paying the principal amount due			X	Use	
b. Equipment was purchased by giving a long-term note to the seller				Neither	Yes
c. Interest was paid on a note, decreasing Interest Payable	X			Use	
d. Accrued taxes were paid	X			Use	
e. A long-term loan was made to a supplier.		X		Use	
f. Interest was received on the long-term loan in (e) above, reducing Interest Receivable	X			Source	
g. Cash dividends were declared and paid			X	Use	
h. A building was acquired in exchange for shares of the company's common stock				Neither	Yes
i. Common stock was sold for cash to investors			X	Source	
j. Equipment was sold for cash		X		Source	
k. Equipment was sold in exchange for a long-term note				Neither	Yes
l. Convertible bonds were converted into common stock				Neither	Yes

Problem 15-10 (30 minutes)

1. and 2.

Eaton Company
Statement of Cash Flows
For the Year Ended December 31, 2008

Operating activities:		
Net income		$ 56
Adjustments to convert net income to cash basis:		
Depreciation charges	25	
Increase in accounts receivable	(80)	
Decrease in inventory	35	
Increase in prepaid expenses	(2)	
Increase in accounts payable	75	
Decrease in accrued liabilities	(10)	
Gain on sale of investments	(5)	
Loss on sale of equipment	2	
Increase in deferred income taxes	8	48
Net cash provided by operating activities		104
Investing activities:		
Proceeds from sale of long-term investments	12	
Proceeds from sale of equipment	18	
Additions to plant and equipment	(110)	
Net cash used for investing activities		(80)
Financing activities:		
Increase in bonds payable	25	
Decrease in common stock	(40)	
Cash dividends	(16)	
Net cash used for financing activities		(31)
Net decrease in cash		(7)
Cash balance, January 1, 2008		11
Cash balance, December 31, 2008		$ 4

Problem 15-10 (continued)

While not a requirement, a worksheet may be helpful.

	Change	Source or Use?	Cash Flow Effect	Ad-just-ments	Adjusted Effect	Classi-fi-cation
Assets (except cash and cash equivalents)						
Current assets:						
Accounts receivable.........	+80	Use	–80		–80	Operating
Inventory..........................	–35	Source	+35		+35	Operating
Prepaid expenses............	+2	Use	–2		–2	Operating
Noncurrent assets:						
Plant and equipment........	+80	Use	–80	–30	–110	Investing
Long-term investments.…	–7	Source	+7	–7	0	Investing
Liabilities, Contra assets, and Stockholders' Equity						
Contra assets:						
Accumulated depreciation	+15	Source	+15	+10	+25	Operating
Current liabilities:						
Accounts payable............	+75	Source	+75		+75	Operating
Accrued liabilities............	–10	Use	–10		–10	Operating

Problem 15-10 (continued)

	Change	*Source or Use?*	*Cash Flow Effect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Noncurrent liabilities:						
Bonds payable.................	+25	Source	+25		+25	Financing
Deferred income taxes.....	+8	Source	+8		+8	Operating
Stockholders' equity:						
Common stock.................	–40	Use	–40		–40	Financing
Retained earnings:						
Net income....................	+56	Source	+56		+56	Operating
Dividends......................	–16	Use	–16		–16	Financing
Additional entries						
Proceeds from sale of equipment........................				+18	+18	Investing
Loss on sale of equipment..				+2	+2	Operating
Proceeds from sale of long-term investments.............				+12	+12	Investing
Gain on sale of long-term investments.....................				–5	–5	Operating
Total....................................			–7	0	–7	

Problem 15-11 (30 minutes)

1. Sales	$750	
Adjustments to a cash basis:		
Increase in accounts receivable	–80	$670
Cost of goods sold	450	
Adjustments to a cash basis:		
Decrease in inventory	–35	
Increase in accounts payable	–75	340
Selling and administrative expenses	223	
Adjustments to a cash basis:		
Increase in prepaid expenses	+2	
Decrease in accrued liabilities	+10	
Depreciation charges	–25	210
Income taxes	24	
Adjustments to a cash basis:		
Increase in deferred income taxes	–8	16
Net cash provided by operating activities		$104

Problem 15-11 (continued)

2. Eaton Company
Statement of Cash Flows
For the Year ended December 31, 2008

Operating activities:		
Cash received from customers		$670
Less cash disbursements for:		
Cost of merchandise sold	$340	
Selling and administrative expenses	210	
Income taxes	16	
Total cash disbursements		566
Net cash provided by operating activities		104
Investing activities:		
Proceeds from sale of long-term investments	12	
Proceeds from sale of equipment	18	
Additions to plant and equipment	(110)	
Net cash used for investing activities		(80)
Financing activities:		
Increase in bonds payable	25	
Decrease in common stock	(40)	
Cash dividends	(16)	
Net cash used for financing activities		(31)
Net decrease in cash		(7)
Cash balance, January 1, 2008		11
Cash balance, December 31, 2008		$ 4

Problem 15-12 (45 minutes)

1. and 2.

Foxboro Company
Statement of Cash Flows
For Year 2

Operating activities:		
Net income		$ 63,000
Adjustments to convert net income to cash basis:		
Depreciation charges	$ 45,000	
Increase in accounts receivable	(70,000)	
Increase in inventory	(48,000)	
Decrease in prepaid expenses	9,000	
Increase in accounts payable	50,000	
Decrease in accrued liabilities	(8,000)	
Gain on sale of equipment	(6,000)	
Increase in deferred income taxes	4,000	(24,000)
Net cash provided by operating activities		39,000
Investing activities:		
Proceeds from sale of equipment	26,000	
Loan to Harker Company	(40,000)	
Additions to plant and equipment	(150,000)	
Net cash used for investing activities		(164,000)
Financing activities:		
Increase in bonds payable	90,000	
Increase in common stock	60,000	
Cash dividends	(33,000)	
Net cash provided by financing activities		117,000
Net decrease in cash		(8,000)
Cash balance, beginning of year		19,000
Cash balance, end of year		$ 11,000

Problem 15-12 (continued)

3. The relatively small amount of cash provided by operating activities during the year was largely the result of a large increase in accounts receivable. (The large increase in inventory was offset by a large increase in accounts payable.) Most of the cash that was provided by operating activities was paid out in dividends. The small amount that remained, combined with the cash provided by the issue of bonds and the issue of common stock, was insufficient to purchase a large amount of equipment and make a loan to another company. As a result, the cash on hand declined sharply during the year.

Problem 15-12 (continued)

While not a requirement, a worksheet may be helpful.

	Change	*Source or Use?*	*Cash Flow Effect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Assets (except cash and cash equivalents)						
Current assets:						
Accounts receivable...........	+70	Use	–70		–70	Operating
Inventory............................	+48	Use	–48		–48	Operating
Prepaid expenses.............	–9	Source	+9		+9	Operating
Noncurrent assets:						
Loan to Harker Company...	+40	Use	–40		–40	Investing
Plant and equipment..........	+120	Use	–120	–30	–150	Investing
Liabilities, Contra assets, and Stockholders' Equity						
Contra assets:						
Accumulated depreciation.	+35	Source	+35	+10	+45	Operating
Current liabilities:						
Accounts payable.............	+50	Source	+50		+50	Operating
Accrued liabilities..............	–8	Use	–8		–8	Operating

Problem 15-12 (continued)

	Change	*Source or Use?*	*Cash Flow Effect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Noncurrent liabilities:						
Bonds payable..................	+90	Source	+90		+90	Financing
Deferred income taxes.......	+4	Source	+4		+4	Operating
Stockholders' equity:						
Common stock..................	+60	Source	+60		+60	Financing
Retained earnings:						
Net income.....................	+63	Source	+63		+63	Operating
Dividends.......................	–33	Use	–33		–33	Financing
Additional entries						
Proceeds from sale of equipment.................................				+26	+26	Investing
Gain on sale of equipment....				–6	–6	Operating
Total....................................			–8	0	–8	

Problem 15-13 (45 minutes)

1. Sales	$700,000	
Adjustments to a cash basis:		
Increase in accounts receivable	–70,000	$630,000
Cost of goods sold	400,000	
Adjustments to a cash basis:		
Increase in inventory	+48,000	
Increase in accounts payable	–50,000	398,000
Selling and administrative expenses	216,000	
Adjustments to a cash basis:		
Decrease in prepaid expenses	– 9,000	
Decrease in accrued liabilities	+ 8,000	
Depreciation charges	–45,000	170,000
Income taxes	27,000	
Adjustments to a cash basis:		
Increase in deferred income taxes	– 4,000	23,000
Net cash provided by operating activities		$ 39,000

Problem 15-13 (continued)

2. Foxboro Company
Statement of Cash Flows
For Year 2

Operating activities:		
Cash received from customers		$630,000
Less cash disbursements for:		
Cost of merchandise purchased	$398,000	
Selling and administrative expenses	170,000	
Income taxes	23,000	
Total cash disbursements		591,000
Net cash provided by operating activities		39,000
Investing activities:		
Proceeds from sale of equipment	26,000	
Loan to Harker Company	(40,000)	
Additions to plant and equipment	(150,000)	
Net cash used for investing activities		(164,000)
Financing activities:		
Increase in bonds payable	90,000	
Increase in common stock	60,000	
Cash dividends	(33,000)	
Net cash provided by financing activities		117,000
Net decrease in cash		(8,000)
Cash balance, beginning of year		19,000
Cash balance, end of year		$ 11,000

Problem 15-13 (continued)

3. The decline in cash is explainable largely by the company's inability to generate a significant amount of cash from operating activities. Note that the company generated only $39,000 from operating activities, although net income was $63,000 for the year. This small amount of cash generated is due primarily to the buildup of accounts receivable. Even though an additional $150,000 was obtained from bonds and common stock ($90,000 + $60,000 = $150,000), the cash available was not sufficient to expand the plant, make a substantial loan to another company, and pay a large cash dividend. As a result, cash declined during the year.

Problem 15-14 (45 minutes)

1. and 2.

Allied Products
Statement of Cash Flows
For the Year Ended December 31, 2008

Operating activities:		
Net income		$ 70,000
Adjustments to convert net income to cash basis:		
Depreciation charges	$ 60,000	
Increase in accounts receivable	(90,000)	
Increase in inventory	(54,000)	
Decrease in prepaid expenses	8,000	
Increase in accounts payable	45,000	
Decrease in accrued liabilities	(7,000)	
Gain on sale of investments	(20,000)	
Loss on sale of equipment	6,000	
Increase in deferred income taxes	3,000	(49,000)
Net cash provided by operating activities		21,000
Investing activities:		
Proceeds from sale of long-term investments	50,000	
Proceeds from sale of equipment	44,000	
Additions to plant and equipment	(200,000)	
Net cash used for investing activities		(106,000)
Financing activities:		
Increase in bonds payable	100,000	
Decrease in common stock	(5,000)	
Cash dividends	(28,000)	
Net cash provided by financing activities		67,000
Net decrease in cash		(18,000)
Cash balance, January 1, 2008		33,000
Cash balance, December 31, 2008		$ 15,000

Problem 15-14 (continued)

3. Although the company reported a large net income for the year, a relatively small amount of cash was provided by operating activities due to increases in both accounts receivable and inventory. Note particularly that operations didn't generate enough cash to even pay the cash dividends for the year. Although the company obtained cash from sales of assets and an issue of bonds, this was not sufficient to cover the cost of a $200,000 increase in plant and equipment for the year. More care should have been taken in planning this major investment in plant assets. Also, the company should probably get better control over its accounts receivable. (Although inventory also increased during the year, this increase was largely offset by the increase in accounts payable.)

Problem 15-14 (continued)

While not a requirement, a worksheet may be helpful.

	Change	Source or Use?	Cash Flow Ef-fect	Ad-just-ments	Adjusted Effect	Classi-fi-cation
Assets (except cash and cash equivalents)						
Current assets:						
Accounts receivable...........	+90	Use	–90		–90	Operating
Inventory...........................	+54	Use	–54		–54	Operating
Prepaid expenses.............	–8	Source	+8		+8	Operating
Noncurrent assets:						
Long-term investments……	–30	Source	+30	–30	0	Investing
Plant and equipment..........	+110	Use	–110	–90	–200	Investing
Liabilities, Contra assets, and Stockholders' Equity						
Contra assets:						
Accumulated depreciation.	+20	Source	+20	+40	+60	Operating
Current liabilities:						
Accounts payable.............	+45	Source	+45		+45	Operating
Accrued liabilities..............	–7	Use	–7		–7	Operating

Problem 15-14 (continued)

	Change	Source or Use?	Cash Flow Ef-fect	Ad-just-ments	Adjusted Effect	Classi-fi-cation
Noncurrent liabilities:						
Bonds payable..................	+100	Source	+100		+100	Financing
Deferred income taxes.......	+3	Source	+3		+3	Operating
Stockholders' equity:						
Common stock..................	–5	Use	–5		–5	Financing
Retained earnings:						
Net income.....................	+70	Source	+70		+70	Operating
Dividends.......................	–28	Use	–28		–28	Financing
Additional entries						
Proceeds from sale of long-term investments...............				+50	+50	Investing
Gain from sale of invest-ments................................				–20	–20	Operating
Proceeds from sale of equip-ment.................................				+44	+44	Investing
Loss on sale of equipment....				+6	+6	Operating
Total....................................			–18	0	–18	

Problem 15-15 (30 minutes)

1. Sales..	$800,000	
Adjustments to a cash basis:		
Increase in accounts receivable............	–90,000	$710,000
Cost of goods sold....................................	500,000	
Adjustments to a cash basis:		
Increase in inventory............................	+54,000	
Increase in accounts payable................	–45,000	509,000
Selling and administrative expenses...........	214,000	
Adjustments to a cash basis:		
Decrease in prepaid expenses..............	– 8,000	
Decrease in accrued liabilities...............	+ 7,000	
Depreciation charges............................	–60,000	153,000
Income taxes..	30,000	
Adjustments to a cash basis:		
Increase in deferred income taxes.........	– 3,000	27,000
Net cash provided by operating activities....		$ 21,000

Problem 15-15 (continued)

2.

Allied Products
Statement of Cash Flows
For the Year Ended December 31, 2008

Operating activities:		
Cash received from customers		$710,000
Less cash disbursements for:		
Cost of merchandise purchased	$509,000	
Selling and administrative expenses	153,000	
Income taxes	27,000	
Total cash disbursements		689,000
Net cash provided by operating activities		21,000
Investing activities:		
Proceeds from sale of long-term investments	50,000	
Proceeds from sale of equipment	44,000	
Additions to plant and equipment	(200,000)	
Net cash used for investing activities		(106,000)
Financing activities:		
Increase in bonds payable	100,000	
Decrease in common stock	(5,000)	
Cash dividends	(28,000)	
Net cash provided by financing activities		67,000
Net decrease in cash		(18,000)
Cash balance, January 1, 2008		33,000
Cash balance, December 31, 2008		$ 15,000

Problem 15-16 (75 minutes)

1. See the worksheet at the end of the solution.

2. Alcorn Products
Statement of Cash Flows
For the Year Ended December 31, 2008

Operating activities:		
Net income		$170,000
Adjustments to convert net income to cash basis:		
Depreciation charges	$ 95,000	
Amortization of patents	6,000	
Increase in accounts receivable	(180,000)	
Decrease in inventory	12,000	
Increase in prepaid expenses	(5,000)	
Increase in accounts payable	300,000	
Decrease in accrued liabilities	(17,000)	
Gain on sale of long-term investments	(60,000)	
Loss on sale of equipment	20,000	
Increase in deferred income taxes	15,000	186,000
Net cash provided by operating activities		356,000
Investing activities:		
Proceeds from sale of long-term investments	110,000	
Proceeds from sale of equipment	70,000	
Loans to subsidiaries	(50,000)	
Additions to plant and equipment	(700,000)	
Net cash used for investing activities		(570,000)

Problem 15-16 (continued)

Financing activities:		
Increase in long-term notes	600,000	
Increase in common stock	90,000	
Retire long-term notes	(380,000)	
Cash dividends to stockholders	(75,000)	
Net cash provided by financing activities		235,000
Net increase in cash and cash equivalents		21,000
Cash balance, January 1, 2008		50,000
Cash balance, December 31, 2008		$ 71,000

Problem 15-16 (continued)

3. The large amount of cash provided by operating activities is traceable for the most part to the $300,000 increase in accounts payable. If the accounts payable had remained basically unchanged, the same as inventory, then operating activities would have provided very little cash and the company might have experienced serious cash problems.

   Note particularly that the cash provided by operating activities was used to purchase plant and equipment. Thus, the company is using cash derived from a short-term source (buildup of accounts payable) to finance long-term asset acquisitions. In short, although the company is generating substantial cash from operating activities, the *quality* of this source is open to question.

   In the company's financing activities, it appears that long-term debt sources, rather than equity sources, are being used to provide for expansion. Although companies frequently use debt to finance expansion, the level of debt in this company is increasing rapidly. (See Chapter 16 for a discussion of the Debt-to-Equity ratio and other financial ratios.)

Problem 15-16 (continued)

	Change	*Source or Use?*	*Cash Flow Effect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Assets (except cash and cash equivalents)						
Current assets:						
Accounts receivable..........	+180	Use	–180		–180	Operating
Inventory..........................	–12	Source	+12		+12	Operating
Prepaid expenses.............	+5	Use	–5		–5	Operating
Noncurrent assets:						
Long-term investments......	–50	Source	+50	–50	0	
Loans to subsidiaries........	+50	Use	–50		–50	Investing
Plant and equipment.........	+570	Use	–570	–130	–700	Investing
Patents.............................	–6	Source	+6		+6	Operating
Liabilities, Contra assets, and Stockholders' Equity						
Contra assets:						
Accumulated depreciation.	+55	Source	+55	+40	+95	Operating
Current liabilities:						
Accounts payable.............	+300	Source	+300		+300	Operating
Accrued liabilities.............	–17	Use	–17		–17	Operating

Problem 15-16 (continued)

	Change	*Source or Use?*	*Cash Flow Effect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Noncurrent liabilities:						
Long-term notes................	+220	Source	+220	+380	+600	Financing
Deferred income taxes......	+15	Source	+15		+15	Operating
Stockholders' equity:						
Common stock.................	+90	Source	+90		+90	Financing
Retained earnings:						
Net income....................	+170	Source	+170		+170	Operating
Dividends.......................	–75	Use	–75		–75	Financing
Additional entries						
Retire long-term notes.........				–380	–380	Financing
Proceeds from sale of equipment........................				+70	+70	Investing
Loss on sale of equipment…				+20	+20	Operating
Proceeds from sale of long-term investments..............				+110	+110	Investing
Gain on sale of long-term investments........................				–60	–60	Operating
Total....................................			+21	0	+21	

Problem 15-17 (30 minutes)

Sales	$3,000,000	
Adjustments to a cash basis:		
Increase in accounts receivable	–180,000	$2,820,000
Cost of goods sold	1,860,000	
Adjustments to a cash basis:		
Decrease in inventory	–12,000	
Increase in accounts payable	–300,000	1,548,000
Selling and administrative expenses	930,000	
Adjustments to a cash basis:		
Increase in prepaid expenses	+5,000	
Decrease in accrued liabilities	+17,000	
Depreciation charges	–95,000	
Patent amortization	–6,000	851,000
Income tax expense	80,000	
Adjustments to a cash basis:		
Increase in deferred income taxes	–15,000	65,000
Net cash provided by operating activities		$ 356,000

Problem 15-18 (60 minutes)

Before the statement of cash flows can be prepared, we must first determine the following amounts:

The gain on sale of equipment.
The cost of plant and equipment purchased during the year.
The depreciation charges for the year.
The net income for the year.

The computations follow:

Plant and Equipment			
Bal.	2,850,000		
(2)	500,000	(1)	160,000
Bal.	3,190,000		

Accumulated Depreciation			
		Bal.	975,000
(1)	145,000	(3)	210,000
		Bal.	1,040,000

Explanation of entries:

(1) The entry to record the sale of equipment:

Cash	35,000	
Accumulated Depreciation	145,000	
Plant and Equipment		160,000
Gain on Sale of Equipment		20,000

(2) The balancing entry to record the plant and equipment purchased during the year ($500,000).

(3) The balancing entry to record the depreciation charges for the year ($210,000).

The company's Retained Earnings account increased by $75,000 and cash dividends totaled $10,000 for the year. Therefore, the net income for the year must have been: $75,000 + $10,000 = $85,000.

Problem 15-18 (continued)

Given the amounts above, the statement of cash flows would be as follows:

Damocles Company
Statement of Cash Flows
For the Year

Operating activities:		
Net income		$ 85,000
Adjustments to convert net income to cash basis:		
Depreciation charges	$210,000	
Increase in accounts receivable	(170,000)	
Decrease in inventory	63,000	
Increase in prepaid expenses	(4,000)	
Increase in accounts payable	48,000	
Decrease in accrued liabilities	(5,000)	
Gain on sale of equipment	(20,000)	
Add increase in deferred income taxes	9,000	131,000
Net cash provided by operating activities		216,000
Investing activities:		
Decrease in long-term loan to subsidiary	80,000	
Proceeds from sale of equipment	35,000	
Additions to long-term investments	(90,000)	
Additions to plant and equipment	(500,000)	
Net cash used for investing activities		(475,000)
Financing activities:		
Increase in bonds payable	200,000	
Increase in common stock	300,000	
Decrease in preferred stock	(180,000)	
Cash dividends	(10,000)	
Net cash provided by financing activities		310,000
Net increase in cash		51,000
Cash balance, beginning		109,000
Cash balance, ending		$160,000

Problem 15-18 (continued)

While not a requirement, a worksheet may be helpful.

	Change	*Source or Use?*	*Cash Flow Ef-fect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Assets (except cash and cash equivalents)						
Current assets:						
Accounts receivable..........	+170	Use	–170		–170	Operating
Inventory..........................	–63	Source	+63		+63	Operating
Prepaid expenses.............	+4	Use	–4		–4	Operating
Noncurrent assets:						
Long-term loans................	–80	Source	+80		+80	Investing
Long-term investments......	+90	Use	–90		–90	Investing
Plant and equipment.........	+340	Use	–340	–160	–500	Investing
Liabilities, Contra assets, and Stockholders' Equity						
Contra assets:						
Accumulated depreciation.	+65	Source	+65	+145	+210	Operating
Current liabilities:						
Accounts payable.............	+48	Source	+48		+48	Operating
Accrued liabilities.............	–5	Use	–5		–5	Operating

Problem 15-18 (continued)

	Change	*Source or Use?*	*Cash Flow Ef-fect*	*Ad-just-ments*	*Adjusted Effect*	*Classi-fi-cation*
Noncurrent liabilities:						
Bonds payable..................	+200	Source	+200		+200	Financing
Deferred income taxes......	+9	Source	+9		+9	Operating
Stockholders' equity:						
Preferred stock..................	–180	Use	–180		–180	Financing
Common stock..................	+300	Source	+300		+300	Financing
Retained earnings:						
Net income.....................	+85	Source	+85		+85	Operating
Dividends.......................	–10	Use	–10		–10	Financing
Additional entries						
Proceeds from sale of equipment.........................				+35	+35	Investing
Gain on sale of equipment…				–20	–20	Operating
Total....................................			+51	0	+51	

Research and Application 15-19 (240 minutes)

1. Netflix mentions four competitive strengths on page 3 of its 10-K: comprehensive library of titles, personalized merchandising, scalable business model, and convenience, selection and fast delivery. These strengths suggest that Netflix's strategy relies on a combination of customer intimacy and operational excellence. Netflix is attempting to create customer intimacy by using proprietary personalized merchandising software to tailor a comprehensive library of 55,000 titles to the unique viewing interests of individual customers. The company's operational excellence value proposition is a function of providing customers with convenient internet-based access to and fast delivery of a large selection of DVD movies. It is also a function of the company's scalable business model. In other words, Netflix's internet-based business model allows it to increase sales without the need to build and staff costly retail outlets.

   While students can make defensible arguments in favor of either value proposition, most internet companies attract customers by offering convenient order placement and delivery of products such as books, DVDs, airline tickets, etc. at low prices. Although these companies seek to increase sales by using software that tailors their offerings to individual customer preferences, the bedrock of their success hinges on operational excellence.

2. Netflix faces numerous business risks as described on pages 8-20 of the annual report. Students may appropriately contend that many of these risks call into question the viability of Netflix's strategy. Here are four risks faced by Netflix. Two of these risks are largely uncontrollable and two have suggested control activities:

- Risk: Video on Demand (VOD) technology, which enables cable and internet providers to immediately transmit movies to customers on demand, may supplant the Netflix business model. Netflix customers cannot get immediate access to the movies they wish to watch because they have to wait until they arrive by mail. Netflix does not have a readily available control activity to reduce this risk, which continues to grow as the quality and speed of VOD content delivery improves.

Research and Application 15-19 (continued)

- Risk: Studios will alter their filmed entertainment release date practices in a manner that threatens Netflix's sales. Page 10 of the 10-K says "DVDs currently enjoy a significant competitive advantage over other distribution channels, such as pay-per-view and VOD, because of the early distribution window for DVDs…. Currently, studios distribute their filmed entertainment content approximately three to six months after theatrical release to the home video market, seven to nine months after theatrical release to pay-per-view and VOD, one year after theatrical release to satellite and cable, and two to three years after theatrical release to basic cable and syndicated networks." If movie studios choose to shrink or close the window of time that companies such as Netflix can rent new DVD releases without competition from competing mediums (such as pay-per-view and VOD), it will lower retailers' DVD rental revenues. Netflix does not have a readily available control activity to reduce this risk.
- Risk: Computer viruses could disrupt Netflix's website. In addition, computer hackers could obtain unauthorized accessed to customers' credit card numbers. Either event would damage the company's reputation and sales growth goals. Control activities: Invest generously in firewalls and encryption technology to keep website and sensitive customer information secure.
- Risk: Inaccurate forecasts may lead to excessive inventory of some movie titles and stockouts of other titles. Control activities: Create software that allows users to rate movies that they have viewed. The customer feedback helps predict what movie titles will thrive or dive.

Research and Application 15-19 (continued)

3. The comparative balance sheet is shown below and on the following page:

Netflix, Inc.
Comparative Balance Sheet
(in thousands)

	Beginning Balance	Ending Balance	Change	Source Or Use?
Assets				
Current assets:				
Cash and cash equivalents	$174,461	$212,256	+37,795	
Prepaid expenses	2,741	7,848	+5,107	Use
Prepaid revenue sharing expenses	4,695	5,252	+557	Use
Deferred tax assets	0	13,666	+13,666	Use
Other current assets	5,449	4,669	−780	Source
Total current assets	187,346	243,691		
DVD library, net	42,158	57,032	+14,874	Use
Intangible assets, net	961	457	−504	Source
Property and equipment, net	18,728	40,213	+21,485	Use
Deposits	1,600	1,249	−351	Source
Deferred tax assets	0	21,239	+21,239	Use
Other assets	1,000	800	−200	Source
Total assets	$251,793	$364,681		

Research and Application 15-19 (continued)

Liabilities and Stockholders' Equity				
Current liabilities:				
Accounts payable	$ 49,775	$ 63,491	+13,716	Source
Accrued expenses	13,131	25,563	+12,432	Source
Deferred revenue	31,936	48,533	+16,597	Source
Current portion of capital leases	68	0	−68	Use
Total current liabilities	94,910	137,587		
Deferred rent	600	842	+242	Source
Total liabilities	95,510	138,429		
Stockholders' Equity:				
Common stock	53	55	+2	Source
Additional paid-in capital	292,843	317,194	+24,351	Source
Deferred stock-based compensation	(4,693)	(1,326)	+3,367	Source
Accumulated other comp. income	(222)	0	+222	Source
Accumulated deficit	(131,698)	(89,671)	+42,027	Source
Total stockholders' equity	156,283	226,252		
Total liabilities and stockholders' equity	$251,793	$364,681		

Research and Application 15-19 (continued)

4. The changes shown on the balance sheet are accounted for on the statement of cash flows as follows (all amounts are in thousands):

- The change in the Cash and Cash Equivalents of $37,795 is shown on the statement of cash flows as the Net Increase in Cash and Cash Equivalents.
- The changes in Prepaid Expenses, Prepaid Revenue Sharing Expenses, and Other Current Assets are accounted for in the operating activities section of the statement of cash flows under Changes in Prepaid Expenses and Other Current Assets. The reconciliation is as follows:

Balance Sheet:	
Prepaid expenses (Use)..	($5,107)
Prepaid revenue sharing expenses (Use)..............	(557)
Other current assets (Source)...............................	780
Use of cash...	($4,884)
Statement of Cash Flows:	
Change in prepaid expenses and other current assets (Use)..	($4,884)

- The changes in Deferred Tax Assets in the current and noncurrent asset sections of the balance sheet are accounted for in the operating activities section of the statement of cash flows under Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities. The reconciliation is as follows:

Balance Sheet:	
Deferred tax assets—current (Use)........................	($13,666)
Deferred tax assets—noncurrent (Use)..................	(21,239)
Use of cash...	($34,905)
Statement of Cash Flows:	
Adjustments to net income—Deferred taxes (Use)	($34,905)

Research and Application 15-19 (continued)

- The change in the DVD Library, Net account on the balance sheet is accounted for in the operating and investing activities sections of the statement of cash flows. The reconciliation is as follows:

Balance Sheet:	
DVD library, net (Use)	($14,874)
Statement of Cash Flows:	
Adjustment to net income—amortization of DVD library (Source)	$96,883
Adjustment to net income—gain on disposal of DVDs (Use)	(3,588)
Acquisitions of DVD library (Use)	(113,950)
Proceeds from sale of DVDs (Source)	5,781
Use of cash	($14,874)

- The change in the Intangible Assets, Net account on the balance sheet is accounted for in the operating and investing activities sections of the statement of cash flows. The reconciliation is as follows:

Balance Sheet:	
Intangible assets, net (Source)	$504
Statement of Cash Flows:	
Adjustments to net income—amortization of intangible assets (Source)	$985
Acquisition of intangible asset (Use)	(481)
Source of cash	$504

- The change in the Property and Equipment, Net account on the balance sheet is accounted for in the operating and investing activities sections of the statement of cash flows. The reconciliation is as follows:

Balance Sheet:	
Property and equipment, net (Use)	($21,485)
Statement of Cash Flows:	
Adjustments to net income—depreciation of property and equipment (Source)	$ 9,134
Purchases of property and equipment (Use)	(30,619)
Use of cash	($21,485)

Research and Application 15-19 (continued)

- The changes in the Deposits and Other Assets balance sheet accounts are accounted for in the investing activities section of the statement of cash flows. The reconciliation is as follows:

Balance Sheet:	
Deposits (Source)...	$351
Other assets (Source)..	200
Source of cash...	$551
Statement of Cash Flows:	
Deposits and other assets..	$551

- The changes in the Accounts Payable ($13,716), Accrued Expenses ($12,432), Deferred Revenue ($16,597), and Deferred Rent ($242) balance sheet accounts are directly recorded in the operating activities section of the statement of cash flows.

- The change in the Current Portion of Capital Leases account on the balance sheet is accounted for in the operating and financing activities sections of the balance sheet. The reconciliation is as follows:

Balance Sheet:	
Current portion of capital leases (Use).....................	($68)
Statement of Cash Flows:	
Adjustments to net income—non-cash interest expense (Source)...	$11
Principal payments on notes payable and capital lease obligations (Use)..	(79)
Use of cash...	$68

- The Common Stock, Additional Paid-In Capital, and Deferred Stock-Based Compensation balance sheet accounts are recorded in the operating and financing activities sections of the statement of cash flows. The reconciliation is as follows:

Research and Application 15-19 (continued)

Balance Sheet:	
Common stock (Source)	$ 2
Additional paid-in capital (Source)	24,351
Deferred stock-based compensation (Source)	3,367
Source of cash	$27,720
Statement of Cash Flows:	
Adjustments to net income—stock-based compensation expense (Source)	$14,327
Proceeds from issuance of commons stock (Source)	13,393
Source of cash	$27,720

- The change in the Accumulated Other Comprehensive Income balance sheet account ($222) is directly accounted for in the financing activities section of the statement of cash flows. The change in the Accumulated Deficit balance sheet account ($42,027) corresponds with the net income reported in the statement of cash flows.

5. Using the approach mentioned in the In Business box, Netflix's free cash flows is calculated as follows (amounts are in thousands):

Net operating income		$ 2,989
Add Depreciation and amortization:		
Property and equipment	$ 9,134	
DVD library	96,883	
Intangible assets	985	107,002
Deduct capital expenditures and dividends:		
Purchases of property and equipment	(30,619)	
Acquisition of intangible asset	(481)	
Acquisition of DVD library	(113,950)	(145,050)
Free cash flow		($ 35,059)

* Netflix did not pay any dividends

Netflix is not generating enough free cash flow to sustain its operations. Unless Netflix can reverse this trend, the company will need to attempt to obtain additional cash from creditors or investors to sustain its on-going investments in important assets such as the DVD library.