Chapter 11
Statement of Cash Flows

REVIEW QUESTIONS

Question 11-1 (LO 11-1)

The three categories of cash flows are operating activities, investing activities, and financing activities. Operating activities include cash receipts and cash payments for transactions relating to revenue and expense activities, essentially the very same activities reported on the income statement. Investing activities include cash transactions involving the purchase and sale of long-term assets and current investments. Financing activities are cash flows resulting from the external financing of a business.

Question 11-2 (LO 11-1)

Changes in long-term asset accounts and current investment accounts are used in determining net cash flows from investing activities. Changes in long-term liability and stockholders' equity accounts are used in determining net cash flows from financing activities.

Question 11-3 (LO 11-1)

Noncash activities are investing and financing activities that do not result in the transfer of cash. Examples of significant noncash investing and financing activities include:

1. Purchase of long-term assets by issuing debt.
2. Purchase of long-term assets by issuing stock.
3. Conversion of bonds payable into common stock.
4. Exchange of long-term assets.

Question 11-4 (LO 11-1)

The income statement provides important information in determining cash flows from operating activities. The balance sheet provides changes in asset, liability, and stockholders' equity accounts from the end of last period to the end of this period to find cash flows from operating, investing, and financing activities. Sometimes we need additional information from the accounting records to determine specific cash inflows or cash outflows for the period.

Question 11-5 (LO 11-2)

The heading includes the company name, the title statement of cash flows, and the period covered. Like the income statement, the statement of cash flows is over a period of time. The three major categories are operating activities, investing activities, and financing activities, in that order. The last three lines of the statement of cash flows include amounts for the net increase or decrease in cash, cash at the beginning of the period, and cash at the end of the period.

Question 11-6 (LO 11-2)

The four steps are to calculate net cash flows from **operating** activities using information from the income statement and changes in current assets and current liabilities, determine the net cash flows from **investing** activities by analyzing changes in long-term asset accounts, determine the net cash flows from **financing** activities by analyzing changes in long-term liabilities and stockholders' equity accounts, and finally, combine the operating, investing, and financing activities and make sure the total **agrees** with the net increase (decrease) in cash.

Question 11-7 (LO 11-2)

Using the indirect method**,** we begin with net income and then list adjustments to net income in order to arrive at operating cash flows. Using the direct method we adjust the items on the income statement to directly show the cash inflows and outflows from operations such as cash received from customers and cash paid for inventory, salaries, rent, interest and taxes.

The indirect method is more common in practice, while the direct method provides a more logical presentation of cash flows.

Question 11-8 (LO 11-3)

The most common adjustments to convert net income to net cash flows are adjustments for noncash items such as depreciation expense, nonoperating items such as a gain or loss on sale of long-term assets, and adjustments for changes in current assets and current liabilities from the beginning to the end of the period examined.

Question 11-9 (LO 11-3)

It is possible to report a loss and still have positive operating cash flows. For example, if depreciation expense was $500,000, a company could have a loss of $200,000 and positive operating cash flows of $300,000. Other adjustments that cause net income to be lower than operating cash flows are decreases in current assets and increases in current liabilities.

Question 11-10 (LO 11-3)

Depreciation expense is an addition to net income in arriving at net operating cash flows. Depreciation expense reduces net income. Remember, though, this expense does not correspond to a cash outflow in the current period. Since we deducted depreciation expense in the determination of net income, we need to add it back in order to eliminate it from our calculation of net operating cash flows.

Question 11-11 (LO 11-3)

We subtract a gain on sale of assets and add a loss on sale of assets to net income in arriving at net cash flows from operating activities. The sale of an asset is an investing activity, not an operating activity. However, a gain on sale of assets increases net income, so we need to subtract it from net income to eliminate it. Similarly, a loss on sale of assets decreases net income, so we need to add it to net income.

Question 11-12 (LO 11-3)

We (a) subtract an increase in current assets, (b) add a decrease in current assets, (c) add an increase in current liabilities, and (d) subtract a decrease in current liabilities from net income under the indirect method.

Question 11-13 (LO 11-3)

An increase in accounts receivable indicates sales were more than cash collections from customers during the period. Therefore, an increase in accounts receivable indicates net income is more than operating cash flows. A decrease in accounts receivable indicates sales were less than cash collections from customers during the period. Therefore, a decrease in accounts receivable indicates net income is less than operating cash flows.

Question 11-14 (LO 11-3, 11-4)

The $1,000 loss on sale of the investment (selling price $9,000 less book value $10,000) is added back to net income in arriving at net operating cash flows. The sale of the investment is also reported as a $9,000 increase to cash from investing activities. This transaction has no effect on financing activities.

Question 11-15 (LO 11-5)

Financing activities are related to changes in short-term debt, long-term debt, and stockholders' equity items other than net income. Common financing activities are borrowing and repaying debt, issuing and buying back the company's stock, and paying dividends.

Question 11-16 (LO 11-1, 11-4, 11-5)

The purchase of land by issuing its own common stock is a noncash activity. Transactions like this that don't increase or decrease cash, but that result in significant investing and financing activities, are reported directly after the cash flow statement or in a separate note to the financial statements.

Question 11-17 (LO 11-6)

Return on assets has net income in the numerator while cash return on assets has cash flows from operations in the numerator. Both ratios divide by average total assets. Analysts often supplement their investigation of income statement and balance sheet amounts with cash flow ratios. Some cash flow ratios are derived by substituting net cash flows from operating activities in place of net income, not to replace those ratios but to complement them. Cash flow ratios offer additional insight in the evaluation of a company's profitability and financial strength.

Question 11-18 (LO 11-6)

Companies have two primary strategies for increasing their cash return on assets. One strategy is to produce highly innovative products that yield very high cash inflows from customers in relationship to the cash outflows to produce and then sell the products. Another strategy is to pursue high asset turnover by efficiently using assets to generate sales (typically selling at lower prices than the competition).

Question 11-19 (LO 11-7)

The primary cash inflows under the direct method are cash received from customers and cash received from interest and dividends. The primary cash outflows are cash paid to suppliers, cash paid for operating expenses, cash paid for interest, and cash paid for income taxes.

Question 11-20 (LO 11-7)

Depreciation expense has no effect on cash flows. It is merely an allocation in the current period of a prior cash expenditure (to purchase the depreciable asset). Therefore, depreciation expense is not reported on the statement of cash flows under the direct method. The gain or loss on sale of land is also *not* reported because it, too, has no effect on operating cash flows.

BRIEF EXERCISES

Brief Exercise 11-1 (LO 11-1)

1. Financing activity.

2. Financing activity.

3. Operating activity.

4. Investing activity.

5. Operating activity.

Brief Exercise 11-2 (LO 11-1)

1. Financing activity.

2. Operating activity.

3. Financing activity.

4. Investing activity.

Brief Exercise 11-3 (LO 11-2)

Operating activities
Investing activities
Financing activities
Net increase (decrease) in cash
Beginning cash balance
Ending cash balance

Brief Exercise 11-4 (LO 11-3)

Cash Flows from Operating Activities		
Net income	$650,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	50,000	
Increase in accounts receivable	(11,000)	
Decrease in accounts payable	(30,000)	
Net cash flows from operating activities		$659,000

Brief Exercise 11-5 (LO 11-3)

Cash Flows from Operating Activities		
Net income	$75,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	90,000	
Increase in prepaid rent	(70,000)	
Increase in accounts payable	10,000	
Increase in income tax payable	23,000	
Net cash flows from operating activities		$128,000

Brief Exercise 11-6 (LO 11-3)

Cash Flows from Operating Activities		
Net income	$70	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	6	
Loss (on sale of equipment)	2	
Increase in accounts receivable	(3)	
Increase in inventory	(5)	
Increase in accounts payable	4	
Net cash flows from operating activities		$74

Brief Exercise 11-7 (LO 11-3)

Cash Flows from Operating Activities		
Net income	$70	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	6	
Gain (on sale of land)	(2)	
Decrease in accounts receivable	3	
Decrease in inventory	5	
Decrease in accounts payable	(4)	
Net cash flows from operating activities		$78

Brief Exercise 11-8 (LO 11-4)

Cash Flows from Investing Activities		
Sale of investments	$40	
Sale of land	16	
Purchase equipment	(26)	
Purchase a patent	(13)	
Net cash flows from investing activities		$17

Brief Exercise 11-9 (LO 11-4)

Cash Flows from Investing Activities		
Collection of note receivable	$100,000*	

*Interest of $10,000 (= $100,000 × 10%) is reported as an operating cash inflow.

Brief Exercise 11-10 (LO 11-4)

If purchased for $850,000:

Cash Flows from Investing Activities	
Sale of land	$900,000

If purchased for $950,000:

Cash Flows from Investing Activities	
Sale of land	$900,000

Brief Exercise 11-11 (LO 11-5)

Cash Flows from Financing Activities		
Issuance of common stock	$42	
Purchase of treasury stock	(22)	
Net cash flows from financing activities		$20

Brief Exercise 11-12 (LO 11-5)

Cash Flows from Financing Activities	
Repayment of note payable	$(100,000)*

*Interest of $10,000 (= $100,000 × 10%) is reported as an operating cash outflow.

Brief Exercise 11-13 (LO 11-1, 11-4, 11-5)

	Investing activities	Financing activities
a.	-0-	$250,000
b.	-0-	-0-
c.	-0-	-0-

Brief Exercise 11-14 (LO 11-6)

Operating Cash Flow	÷	Average Total Assets	=	Cash Return on Assets
\$60,000	÷	(\$500,000 + \$800,000)/2	=	9.2%

Operating Cash Flow	÷	Sales	=	Cash Flow to Sales
\$60,000	÷	\$2,100,000	=	2.9%

Sales	÷	Average Total Assets	=	Asset Turnover
\$2,100,000	÷	(\$500,000 + \$800,000)/2	=	3.2 times

Brief Exercise 11-15 (LO 11-6)

$$\frac{\text{Operating Cash Flow}}{(\$620{,}000 + \$820{,}000)/2} = 0.25$$

$$\frac{\text{Operating Cash Flow}}{\$720{,}000} = 0.25$$

Operating Cash Flow = 0.25 x (\$720,000) = \$180,000

Brief Exercise 11-16 (LO 11-7)

Net sales	\$73
+ Decrease in accounts receivable	9
Cash received from customers	\$82

Brief Exercise 11-17 (LO 11-7)

Cost of goods sold	$45
+ Increase in inventory	5
= Purchases	50
− Increase in accounts payable	(7)
= Cash paid to suppliers	$43

Brief Exercise 11-18 (LO 11-7)

Operating expenses	$985,000
+ Increase in prepaid rent	30,000
− Increase in salaries payable	(20,000)
= Cash paid for operating expenses	$995,000

Brief Exercise 11-19 (LO 11-7)

Income tax expense	$340,000
− Increase in income taxes payable	(15,000)
Cash paid for income taxes	$325,000

Brief Exercise 11-20 (LO 11-5, 11-7)

Net income	$220,000
− Increase in retained earnings	(120,000)
Cash paid for dividends	$100,000

EXERCISES

Exercise 11-1 (LO 11-1, 11-2, 11-3, 11-4, 11-5, 11-6)

Items

__e__ 1. Operating activities
__f__ 2. Investing activities
__d__ 3. Financing activities
__g__ 4. Noncash activities
__a__ 5. Indirect method
__h__ 6. Direct method
__b__ 7. Depreciation expense
__c__ 8. Cash return on assets

Descriptions

a. Begins with net income and then lists adjustments to net income in order to arrive at operating cash flows.
b. Item included in net income, but excluded from net operating cash flows.
c. Net cash flows from operating activities divided by average total assets.
d. Cash transactions involving lenders and investors.
e. Cash transactions involving net income.
f. Cash transactions for the purchase and sale of long-term assets.
g. Purchase of long-term assets by issuing stock to seller.
h. Shows the cash inflows and outflows from operations such as cash received from customers and cash paid for inventory, salaries, rent, interest and taxes.

Exercise 11-2 (LO 11-1)

The $25,000 increase in notes payable should be properly recorded as an increase in cash from financing activities. While most changes in current assets and current liabilities are included in operating activities, borrowing money from a bank is clearly a financing activity.

Ethics come into play because, by recording the increase in notes payable as an operating rather than a financing activity, operating cash flows increase to $210,000 ($185,000 + $25,000) and Justin Lake receives a $100,000 bonus.

Nicole should insist that the $25,000 increase in notes payable be recorded as an increase in cash from financing activities. Classroom discussion might consider what additional actions Nicole should take if Justin Lake does not accept her opinion.

Exercise 11-3 (LO 11-1)

1. Investing activities
2. Operating activities
3. Operating activities
4. Financing activities
5. Operating activities
6. Investing activities
7. Investing activities
8. Noncash activities
9. Operating activities
10. Financing activities

Exercise 11-4 (LO 11-1)

1. Financing activities
2. Investing activities
3. Operating activities
4. Operating activities
5. Noncash activities
6. Financing activities
7. Investing activities
8. Operating activities

Exercise 11-5 (LO 11-1)

1. Investing activities, Operating activities (Gain on sale of land)
2. Financing activities
3. Investing activities
4. Operating activities

Exercise 11-6 (LO 11-1)

1. Investing activities

2. Investing activities

3. Financing activities

4. Financing activities

Exercise 11-7 (LO 11-2)

Technology Solutions
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income		
Adjustments to reconcile net income to net cash flows from operating activities:		
List of items adjusting net income to operating cash flows		
Net cash flows from operating activities		$$$
Cash Flows from Investing Activities		
List of cash inflows and outflows from investing activities		
Net cash flows from investing activities		$$$
Cash Flows from Financing Activities		
List of cash inflows and outflows from financing activities		
Net cash flows from financing activities		$$$
Net increase (decrease) in cash		$$$
Cash at the beginning of the period		$$$
Cash at the end of the period		$$$
Note: Noncash Activities		
List of noncash transactions		$$$

Exercise 11-8 (LO 11-3)

Cash Flows from Operating Activities		
Net income	$165,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Gain (on sale of land)	(20,000)	
Increase in accounts receivable	(35,000)	
Increase in inventory	(20,000)	
Decrease in accounts payable	(55,000)	
Net cash flows from operating activities		$35,000

All of the adjustments are subtracted from net income in arriving at net operating cash flows. This could be a natural occurrence in the data, or it could imply that management may be using some of these items to overstate net income.

Exercise 11-9 (LO 11-3)

Cash Flows from Operating Activities		
Net income	$65,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	15,000	
Loss (on sale of land)	6,000	
Decrease in accounts receivable	28,000	
Decrease in inventory	37,000	
Increase in accounts payable	45,000	
Net cash flows from operating activities		$196,000

All of the adjustments are added to net income in arriving at net operating cash flows. This could be a natural occurrence in the data, or it could imply that management may be using some of these items to minimize net income.

Exercise 11-10 (LO 11-2, 11-3, 11-4, 11-5)

Plasma Screens Corporation
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$ 79,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	150,000	
Decrease in accounts receivable	15,000	
Increase in inventory	(16,000)	
Increase in prepaid rent	(3,000)	
Increase in accounts payable	15,000	
Decrease in interest payable	(6,900)	
Increase in income tax payable	4,000	
Net cash flows from operating activities		$237,100
Cash Flows from Investing Activities		
Purchase of equipment	(110,000)	
Net cash flows from investing activities		(110,000)
Cash Flows from Financing Activities		
Payment of notes payable	(115,000)	
Payment of cash dividends	(30,000)	
Net cash flows from financing activities		(145,000)
Net increase (decrease) in cash		(17,900)
Cash at the beginning of the period		126,800
Cash at the end of the period		$108,900

Exercise 11-11 (LO 11-3)

Peach Computer
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$130,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	60,000	
Decrease in accounts receivable	8,000	
Increase in inventory	(25,000)	
Decrease in prepaid rent	3,000	
Increase in accounts payable	13,000	
Decrease in income tax payable	(9,000)	
Net cash flows from operating activities		$180,000

Exercise 11-12 (LO 11-4)

Sale of building	$ 500,000
Investment in Fleet's common stock	(120,000)
Purchase of equipment	(65,000)
Loan to supplier (note receivable)	(100,000)
	$ 215,000

Exercise 11-13 (LO 11-5)

Issuance of common stock	$ 160,000
Purchase treasury stock	(75,000)
Payment of dividend	(40,000)
Repay notes payable	(90,000)
	$(45,000)

Exercise 11-14 (LO 11-6)

Requirement 1

($ in millions)	Net Income	÷	Average Total Assets	=	Return on Assets
Zoogle	$6,620	÷	($41,768 + $50,497)/2	=	14.3%

Requirement 2

($ in millions)	Operating Cash Flows	÷	Average Total Assets	=	Cash Return on Assets
Zoogle	$9,326	÷	($41,768 + $50,497)/2	=	20.2%

Requirement 3

($ in millions)	Operating Cash Flows	÷	Net Sales	=	Cash Flow to Sales
Zoogle	$9,326	÷	$24,651	=	37.8%

($ in millions)	Net Sales	÷	Average Total Assets	=	Asset Turnover
Zoogle	$24,651	÷	($41,768 + $50,497)/2	=	0.5 times

Exercise 11-15 (LO 11-7)

Peach Computer
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Cash received from customers	$2,058,000	
Cash paid to suppliers	(1,162,000)	
Cash paid for operating expenses	(657,000)	
Cash paid for income taxes	(59,000)	
Net cash flows from operating activities		$180,000

Net sales	$2,050,000
+ Decrease in accounts receivable	8,000
= Cash received from customers	$2,058,000
Cost of goods sold	$1,150,000
+ Increase in inventory	25,000
= Purchases	1,175,000
− Increase in accounts payable	(13,000)
= Cash paid to suppliers	$1,162,000
Operating expenses	$660,000
− Decrease in prepaid rent	(3,000)
= Cash paid for operating expenses	$657,000
Income tax expense	$50,000
+ Decrease in income tax payable	9,000
= Cash paid for income taxes	$59,000

Exercise 11-16 (LO 11-7)

Net sales	$3,200,000
− Increase in accounts receivable	(55,000)
= Cash received from customers	$3,145,000

Cost of goods sold	$2,000,000
− Decrease in inventory	(40,000)
= Purchases	1,960,000
+ Decrease in accounts payable	17,000
= Cash paid to suppliers	$1,977,000

Income tax expense	$150,000
− Increase in income tax payable	(9,000)
= Cash paid for income taxes	$141,000

Exercise 11-17 (LO 11-7)

1.

($ in millions)

Net sales	$91,758
− Increase in accounts receivable	(1,733)
= Cash received from customers	$90,025

2.

Cost of goods sold	$69,278
+ Increase in inventory	883
= Purchases	70,161
+ Decrease in accounts payable	1,967
= Cash paid to suppliers	$72,128

Exercise 11-18 (LO 11-7)

Requirement 1

Situation	Sale Revenue	Accounts Receivable Increase (Decrease)	Cash Received from Customers*
1.	200	-0-	**200**
2.	200	30	**170**
3.	200	(30)	**230**

* Cash received from customers = Sales revenue
+ Decrease in Accounts Receivable
− Increase in Accounts Receivable

Requirement 2

		Debit	Credit
1.	Cash	**200**	
	Sales Revenue		200
2.	Cash	**170**	
	Accounts Receivable	30	
	Sales Revenue		200
3.	Cash	**230**	
	Accounts Receivable		30
	Sales Revenue		200

Exercise 11-19 (LO 11-7)

Requirement 1

Sit.	Cost of Goods Sold	Inventory Increase (Decrease)	Accounts Payable Increase (Decrease)	Cash Paid to Suppliers
1.	150	25	20	**155**
2.	150	(25)	20	**105**
3.	150	25	(20)	**195**
4.	150	(25)	(20)	**145**

* Cash paid to suppliers = Cost of goods sold
+ Increase in Inventory
− Decrease in Inventory
+ Decrease in Accounts Payable
− Increase in Accounts Payable

Requirement 2

	Account	Debit	Credit
1.	Cost of Goods Sold	150	
	Inventory	25	
	Accounts Payable		20
	Cash		**155**
2.	Cost of Goods Sold	150	
	Inventory		25
	Accounts Payable		20
	Cash		**105**
3.	Cost of Goods Sold	150	
	Inventory	25	
	Accounts Payable	20	
	Cash		**195**
4.	Cost of Goods Sold	150	
	Accounts Payable	20	
	Inventory		25
	Cash		**145**

Exercise 11-20 (LO 11-7)

Requirement 1

Sit.	Operating Expenses	Prepaid Insurance Increase (Decrease)	Salaries Payable Increase (Decrease)	Cash Paid for Operating Expenses
1.	100	15	10	**105**
2.	100	(15)	10	**75**
3.	100	15	(10)	**125**
4.	100	(15)	(10)	**95**

* Cash paid for operating expenses = Operating expenses
+ Increase in Prepaid Insurance
− Decrease in Prepaid Insurance
+ Decrease in Salaries Payable
− Increase in Salaries Payable

Requirement 2

		Debit	Credit
1.	Operating Expenses	100	
	Prepaid Insurance	15	
	Salaries Payable		10
	Cash		**105**
2.	Operating Expenses	100	
	Prepaid Insurance		15
	Salaries Payable		10
	Cash		**75**
3.	Operating Expenses	100	
	Prepaid Insurance	15	
	Salaries Payable	10	
	Cash		**125**
4.	Operating Expenses	100	
	Salaries Payable	10	
	Prepaid Insurance		15
	Cash		**95**

PROBLEMS: SET A

Problem 11-1A (LO 11-1)

Type of Activity	Cash Inflow or Outflow	Transaction
O	CO	1. Payment of employee salaries.
I	CI	2. Sale of land for cash.
O	CO	3. Purchase of rent in advance.
O	CI	4. Collection of an account receivable.
F	CI	5. Issuance of common stock.
O	CO	6. Purchase of inventory.
I	CI	7. Collection of notes receivable.
O	CO	8. Payment of income taxes.
NC	NE	9. Sale of equipment for a note receivable.
F	CI	10. Issuance of bonds.
I	CO	11. Loan to another company.
F	CO	12. Payment of a long-term note payable.
F	CO	13. Purchase of treasury stock.
O	CO	14. Payment of an account payable.
I	CI	15. Sale of equipment for cash.

Problem 11-2A (LO 11-1, 11-3, 11-4, 11-5)

ATM Software Developers
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$12,400	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	5,465	
Increase in accounts receivable	(4,090)	
Decrease in inventory	1,475	
Decrease in prepaid rent	905	
Decrease in accounts payable	(1,760)	
Net cash flows from operating activities		$14,395
Cash Flows from Investing Activities		
Cash received from sale of land	8,650	
Purchase of equipment	(39,865)	
Net cash flows from investing activities		(31,215)
Cash Flows from Financing Activities		
Issuance of common stock	13,075	
Issuance of long-term notes payable	16,495	
Payment of dividends	(6,370)	
Purchase of treasury stock	(2,615)	
Net cash flows from financing activities		20,585
Net increase (decrease) in cash		3,765
Cash at the beginning of the period		7,510
Cash at the end of the period		$11,275

Problem 11-3A (LO 11-4)

Alliance Technologies
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$56,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	17,000	
Decrease in accounts receivable	7,000	
Increase in inventory	(14,000)	
Decrease in prepaid rent	10,000	
Increase in salaries payable	6,000	
Decrease in accounts payable	(9,000)	
Increase in income tax payable	24,000	
Net cash flows from operating activities		$97,000

Problem 11-4A (LO 11-2, 11-3, 11-4, 11-5)

Video Phones, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$104,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	37,000	
Loss (on sale of land)	9,000	
Increase in accounts receivable	(22,000)	
Decrease in inventory	40,000	
Increase in prepaid rent	(7,200)	
Decrease in accounts payable	(16,000)	
Decrease in interest payable	(5,000)	
Increase in income tax payable	1,000	
Net cash flows from operating activities		$140,800
Cash Flows from Investing Activities		
Purchase investment in bonds	(115,000)	
Proceeds from sale of land	31,000	
Net cash flows from investing activities		(84,000)
Cash Flows from Financing Activities		
Payment of cash dividends	(30,000)	
Net cash flows from financing activities		(30,000)
Net increase (decrease) in cash		26,800
Cash at the beginning of the period		227,800
Cash at the end of the period		$254,600
Note: Noncash Activities		
Purchase equipment issuing a note payable		$70,000

Problem 11-5A (LO 11-6)

Requirement 1

($ in millions)	Net Income	÷	Average Total Assets	=	Return on Assets
Cyberdyne	$9,737	÷	($57,851 + $72,574)/2	=	14.9%
Virtucon	$1,049		($14,928 + $14,783)/2	=	7.1%

Requirement 2

($ in millions)	Operating Cash Flows	÷	Average Total Assets	=	Cash Return on Assets
Cyberdyne	$14,565	÷	($57,851 + $72,574)/2	=	22.3%
Virtucon	$1,324	÷	($14,928 + $14,783)/2	=	8.9%

Requirement 3

($ in millions)	Operating Cash Flows	÷	Net Sales	=	Cash Flow to Sales
Cyberdyne	$14,565	÷	$37,905	=	38.4%
Virtucon	$1,324	÷	$4,984	=	26.6%

($ in millions)	Net Sales	÷	Average Total Assets	=	Asset Turnover
Cyberdyne	$37,905	÷	($57,851 + $72,574)/2	=	0.6 times
Virtucon	$4,984	÷	($14,928 + $14,783)/2	=	0.3 times

Requirement 4

Cyberdyne has a better return on assets, cash return on assets, cash flow to sales, and asset turnover.

*Problem 11-6A (LO 11-7)

Alliance Technologies
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Cash received from customers	$412,000	
Cash paid to suppliers	(258,000)	
Cash paid for operating expenses	(54,000)	
Cash paid for income taxes	(3,000)	
Net cash flows from operating activities		$97,000

Net sales	$405,000
+ Decrease in accounts receivable	7,000
= Cash received from customers	$412,000
Cost of goods sold	$235,000
+ Increase in inventory	14,000
= Purchases	249,000
+ Decrease in accounts payable	9,000
= Cash paid to suppliers	$258,000
Operating expenses	$70,000
− Decrease in prepaid rent	(10,000)
− Increase in salaries payable	(6,000)
= Cash paid for operating expenses	$54,000
Income tax expense	$27,000
− Increase in income tax payable	(24,000)
= Cash paid for income taxes	$ 3,000

*Problem 11-7A (LO 11-7)

Video Phones, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Cash received from customers	$3,614,000	
Cash paid to suppliers	(2,426,000)	
Cash paid for operating expenses	(965,200)	
Cash paid for interest	(25,000)	
Cash paid for income taxes	(57,000)	
Net cash flows from operating activities		$140,800
Cash Flows from Investing Activities		
Purchase investment in bonds	(115,000)	
Proceeds from sale of land	31,000	
Net cash flows from investing activities		(84,000)
Cash Flows from Financing Activities		
Payment of cash dividends	(30,000)	
Net cash flows from financing activities		(30,000)
Net increase (decrease) in cash		26,800
Cash at the beginning of the period		227,800
Cash at the end of the period		$254,600
Note: Noncash Activities		
Purchase equipment issuing a note payable		$70,000

Net sales	$3,636,000
− Increase in accounts receivable	(22,000)
= Cash received from customers	$3,614,000

Cost of goods sold	$2,450,000
− Decrease in inventory	(40,000)
= Purchases	2,410,000
+ Decrease in accounts payable	16,000
= Cash paid to suppliers	$2,426,000

Operating expenses	$958,000
+ Increase in prepaid rent	7,200
= Cash paid for operating expenses	$965,200

Interest expense	$20,000
+ Decrease in interest payable	5,000
= Cash paid for interest	$25,000

Income tax expense	$58,000
− Increase in income tax payable	(1,000)
= Cash paid for income taxes	$57,000

*Problem 11-8A (LO 11-3, 1-7)

Reverse Logic
Income Statement
For the Year Ended December 31, 2021

Net sales		**$4,108**
Expenses:		
Cost of goods sold	**$2,624**	
Operating expenses	**1,158**	
Depreciation expense	62	
Income tax expense	**90**	
Total expenses		**3,934**
Net Income		$ 174

Net sales	**$4,108**
− Increase in accounts receivable	(38)
= Cash received from customers	$4,070
Cost of goods sold	**$2,624**
− Decrease in inventory	(50)
= Purchases	2,574
+ Decrease in accounts payable	11
= Cash paid to suppliers	$2,585
Operating expenses	**$1,158**
+ Increase in prepaid rent	5
= Cash paid for operating expenses	$1,163
Income tax expense	**$90**
+ Decrease in income tax payable	9
= Cash paid for income taxes	$99

PROBLEMS: SET B

Problem 11-1B (LO 11-1)

Type of Activity	Cash Inflow or Outflow	Transaction
F	CI	1. Issue common stock.
I	CI	2. Sale of land for cash.
F	CO	3. Purchase of treasury stock.
O	CI	4. Collection of an account receivable.
F	CI	5. Issuance of a note payable.
O	CO	6. Purchase of inventory.
F	CO	7. Repayment of note payable.
O	CO	8. Payment of employee salaries.
NC	NE	9. Sale of equipment for a note receivable.
F	CI	10. Issuance of bonds.
I	CO	11. Investment in bonds.
O	CO	12. Payment of interest on bonds payable.
F	CO	13. Payment of a cash dividend.
I	CO	14. Purchase of a building.
I	CI	15. Collection of a note receivable.

Problem 11-2B (LO 11-1, 11-3, 11-4, 11-5)

CPU Hardware Designers
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$ 80,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	30,000	
Loss (on sale of land)	8,000	
Increase in accounts receivable	(70,000)	
Increase in inventory	(40,000)	
Increase in prepaid rent	(11,000)	
Increase in accounts payable	11,000	
Net cash flows from operating activities		$ 8,000
Cash Flows from Investing Activities		
Cash received from sale of land	4,000	
Purchase of equipment	(230,000)	
Net cash flows from investing activities		(226,000)
Cash Flows from Financing Activities		
Issuance of common stock	300,000	
Payment of dividends	(50,000)	
Repayment of notes payable	(60,000)	
Net cash flows from financing activities		190,000
Net increase (decrease) in cash		(28,000)
Cash at the beginning of the period		90,000
Cash at the end of the period		$ 62,000

Problem 11-3B (LO 11-3)

Software Associates
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$78,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	33,000	
Decrease in accounts receivable	10,000	
Decrease in inventory	13,000	
Increase in prepaid rent	(3,000)	
Decrease in salaries payable	(4,000)	
Increase in accounts payable	7,000	
Increase in income tax payable	8,000	
Net cash flows from operating activities		$142,000

Problem 11-4B (LO 11-2, 11-3, 11-4, 11-5)

Virtual Gaming Systems
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Net income	$195,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	33,000	
Gain (on sale of land)	(7,000)	
Decrease in accounts receivable	16,000	
Increase in inventory	(15,000)	
Decrease in prepaid rent	2,600	
Decrease in accounts payable	(63,000)	
Increase in interest payable	1,100	
Decrease in income tax payable	(4,000)	
Net cash flows from operating activities		$158,700
Cash Flows from Investing Activities		
Purchase investment in stock	(95,000)	
Proceeds from sale of land	62,000	
Net cash flows from investing activities		(33,000)
Cash Flows from Financing Activities		
Issue common stock	60,000	
Payment of cash dividends	(120,000)	
Net cash flows from financing activities		(60,000)
Net increase (decrease) in cash		65,700
Cash at the beginning of the period		343,800
Cash at the end of the period		$409,500
Note: Noncash Activities		
Purchase equipment issuing a note payable		$30,000

Problem 11-5B (LO 11-6)

Requirement 1

($ in millions)	Net Income	÷	Average Total Assets	=	Return on Assets
InGen	$7,074	÷	($124,503 + $129,517)/2	=	5.6%
RDA	$15,855	÷	($113,452 + $116,433)/2	=	13.8%

Requirement 2

($ in millions)	Operating Cash Flows	÷	Average Total Assets	=	Cash Return on Assets
InGen	$12,639	÷	($124,503 + $129,517)/2	=	10.0%
RDA	$19,846	÷	($113,452 + $116,433)/2	=	17.3%

Requirement 3

($ in millions)	Operating Cash Flows	÷	Net Sales	=	Cash Flow to Sales
InGen	$12,639	÷	$127,245	=	9.9%
RDA	$19,846	÷	$106,916	=	18.6%

($ in millions)	Net Sales	÷	Average Total Assets	=	Asset Turnover
InGen	$127,245	÷	($124,503 + $129,517)/2	=	1.0 times
RDA	$106,916	÷	($113,452 + $116,433)/2	=	0.9 times

Requirement 4

RDA has a higher return on assets, cash return on assets, and cash flow to sales ratio. However, InGen has a slightly higher asset turnover ratio.

*Problem 11-6B (LO 11-7)

Software Associates
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Cash received from customers	$720,000	
Cash paid to suppliers	(400,000)	
Cash paid for operating expenses	(137,000)	
Cash paid for income taxes	(41,000)	
Net cash flows from operating activities		$142,000

Net sales	$710,000
+ Decrease in accounts receivable	10,000
= Cash received from customers	$720,000
Cost of goods sold	$420,000
− Decrease in inventory	(13,000)
= Purchases	407,000
− Increase in accounts payable	(7,000)
= Cash paid to suppliers	$400,000
Operating expenses	$130,000
+ Increase in prepaid rent	3,000
+ Decrease in salaries payable	4,000
= Cash paid for operating expenses	$137,000
Income tax expense	$49,000
− Increase in income tax payable	(8,000)
= Cash paid for income taxes	$41,000

*Problem 11-7B (LO 11-7)

Virtual Gaming Systems
Statement of Cash Flows
For the Year Ended December 31, 2021

Cash Flows from Operating Activities		
Cash received from customers	$2,616,000	
Cash paid to suppliers	(1,728,000)	
Cash paid for operating expenses	(612,400)	
Cash paid for interest	(32,900)	
Cash paid for income taxes	(84,000)	
Net cash flows from operating activities		$158,700
Cash Flows from Investing Activities		
Purchase investment in stock	(95,000)	
Proceeds from sale of land	62,000	
Net cash flows from investing activities		(33,000)
Cash Flows from Financing Activities		
Issue common stock	60,000	
Payment of cash dividends	(120,000)	
Net cash flows from financing activities		(60,000)
Net increase (decrease) in cash		65,700
Cash at the beginning of the period		343,800
Cash at the end of the period		$409,500
Note: Noncash Activities		
Purchase equipment issuing a note payable		$30,000

Net sales	$2,600,000
+ Decrease in accounts receivable	16,000
= Cash received from customers	$2,616,000
Cost of goods sold	$1,650,000
+ Increase in inventory	15,000
= Purchases	1,665,000
+ Decrease in accounts payable	63,000
= Cash paid to suppliers	$1,728,000
Operating expenses	$615,000
− Decrease in prepaid rent	(2,600)
= Cash paid for operating expenses	$612,400
Interest expense	$34,000
− Increase in interest payable	(1,100)
= Cash paid for interest	$32,900
Income tax expense	$80,000
+ Decrease in income tax payable	4,000
= Cash paid for income taxes	$84,000

*Problem 11-8B (LO 11-3, 11-7)

Electronic Transformations
Income Statement
For the Year Ended December 31, 2021

Net sales		**$96,000**
Expenses:		
Operating expenses	**$34,000**	
Depreciation expense	9,000	
Income tax expense	**17,000**	
Total expenses		**60,000**
Net Income		$36,000

Net sales	**$96,000**
− Increase in accounts receivable	(13,000)
= Cash received from customers	$83,000
Operating expenses	**$34,000**
− Increase in accounts payable	(8,000)
= Cash paid for operating expenses	$26,000
Income tax expense	**$17,000**
− Increase in income tax payable	(6,000)
= Cash paid for income taxes	$11,000

ADDITIONAL PERSPECTIVES

Continuing Problem: Great Adventures

AP11-1

Great Adventures, Inc.
Statement of Cash Flows
For the Year Ended December 31, 2022

Cash Flows from Operating Activities		
Net income	$ 35,835	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	17,250	
Increase in accounts receivable	(47,600)	
Increase in inventory	(7,000)	
Decrease in other current assets	3,600	
Increase in accounts payable	18,000	
Increase in income tax payable	500	
Increase in other current liabilities	21,000	
Net cash flows from operating activities		$ 41,585
Cash Flows from Investing Activities		
Purchase of buildings	(800,000)	
Purchase of equipment	(22,000)	
Net cash flows from investing activities		(822,000)
Cash Flows from Financing Activities		
Repayment of notes payable	(6,117)	
Issued common stock	1,000,000	
Purchased treasury stock	(150,000)	
Sale of treasury stock	64,000	
Payment of dividends	(11,400)	
Net cash flows from financing activities		896,483
Net increase (decrease) in cash		116,068
Cash at the beginning of the period		64,500
Cash at the end of the period		$180,568
Note: Noncash Activities		
Purchase land issuing a note payable		$500,000

Financial Analysis: American Eagle

AP11-2

($ in thousands)

1. $35,000 increase.

2. $394,426.

   Yes. Net cash flows from operating activities increased in the most recent year.

   The largest reconciling item between net income and net operating cash flows in the most recent year is **depreciation and amortization** of $169,473.

3. $(172,150) .

   The largest investment activity during the most recent year is **capital expenditures for property and equipment** of $(169,469).

4. $(188,772).

   The largest financing activity during the most recent year is the **payment of cash dividends** of $88,548.

Financial Analysis: Buckle

AP11-3

($ in thousands)

1. $31,450 decrease.

2. $119,721.

   No. Net cash flows from operating activities decreased in the most recent year.

   The largest reconciling item between net income and net operating cash flows in the most recent year is **depreciation and amortization** of $30,745.

3. $(17,297).

   The largest investment activity during the most recent year is **purchases of investments** for $56,631.

4. $(133,874).

   The largest financing activity during the most recent year is the **payment of dividends** of $133,874.

Comparative Analysis: American Eagle vs. Buckle

AP11-4

($ in thousands)

1.

	Operating Cash Flow	÷	Average Total Assets	=	Cash Return on Assets
American Eagle	$394,426	÷	($1,816,313 + 1,782,660)/2	=	21.9%

	Operating Cash Flow	÷	Sales	=	Cash Flow to Sales
American Eagle	$394,426	÷	$3,795,549	=	10.4%

	Sales	÷	Average Total Assets	=	Asset Turnover
American Eagle	$3,795,549	÷	($1,816,313 + 1,782,660)/2	=	2.1 times

2.

	Operating Cash Flow	÷	Average Total Assets	=	Cash Return on Assets
Buckle	$119,721	÷	($538,616 + $579,847)/2	=	21.4%

	Operating Cash Flow	÷	Sales	=	Cash Flow to Sales
Buckle	$119,721	÷	$913,380	=	13.1%

	Sales	÷	Average Total Assets	=	Asset Turnover
Buckle	$913,380	÷	($538,616 + $579,847)/2	=	1.6 times

3. American has a higher cash return on assets (21.9% vs. 21.4%), a lower cash flow to sales (10.4% vs. 13.1%), and a higher asset turnover (2.1 times vs. 1.6 times) compared to Buckle.

Ethics

AP11-5

Requirement 1

Cash Flows from Operating Activities		
Net income	$65,000	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	10,000	
Increase in accounts payable	25,000	
Increase in interest payable	10,000	
Net cash flows from operating activities		$110,000

Requirement 2

Cash Flows from Operating Activities		
Net income	$ 30,000[a]	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	10,000	
Increase in accounts receivable	(60,000)[b]	
Increase in inventory	(40,000)[c]	
Increase in accounts payable	25,000	
Increase in interest payable	10,000	
Net cash flows from operating activities		$(25,000)

[a] $65,000 as reported − $35,000 profit on assumed sale of inventory ($75,000 − $40,000)
[b] Increase in accounts receivable = $60,000 actual ending balance − $0 beginning balance (first year of operations).
[c] Increase in inventory = $40,000 actual ending balance − $0 beginning balance (first year of operations).

Requirement 3

Yes.

The company is reporting a positive net income of $65,000 and positive operating cash flows of $110,000. Both amounts are overstated. Net income is overstated by $35,000, the assumed sale of inventory. Operating cash flows are overstated by $135,000 (= $60,000 assumed cash to be collected from current accounts receivable + $75,000 assumed cash to be collected from the sale of inventory). The company has actual negative operating cash flows of $25,000 this year, and its ending cash balance is actually only $15,000. If the negative operating cash flows continue, it will be difficult for Larry to pay back the loan. If Matt instead uses Larry's assumptions, operating cash flows are highly positive, indicating the company's likely ability to pay back the loan.

Requirement 4

No.

Without additional information, it's not possible for Matt to determine the likelihood that customer accounts will be collected or for what amount the inventory will be sold. Matt should not use the personal gain from potential future employment in his decision to put the bank's cash at risk. Larry likely mentioned the potential employment position as it could influence Matt's decision regarding the approval of the $100,000 loan increase. It is important that Matt consider the loan application from the perspective of what is best for the bank. Matt may wish to obtain the opinion of another bank employee, especially if he has difficulty making an unbiased decision under these circumstances.

Internet Research

AP11-6

This case provides an opportunity for students to learn more about Form 10-K, containing the annual report for publicly traded companies. It also introduces students to EDGAR, one of the largest sources of accounting information available on the internet. Answers to the assignment will vary depending on the 10-K filing chosen.

Written Communication

AP11-7

Polar Opposites
Statement of Cash Flows
For the Year Ended December 31, 2021

($ in millions)		
Cash Flows from Operating Activities		
Net income	$ 5	
Adjustments to reconcile net income to net cash flows from operating activities:		
Depreciation expense	4	
Increase in accounts receivable	(16)	
Increase in inventory	(14)	
Increase in accounts payable	7	
Increase in accrued expenses payable	9	
Net cash flows from operating activities		$ (5)

As the operating activities section under the indirect method indicates, net income is $5 million, yet cash flow from operating activities is a negative $5 million. This is primarily due to the large increase in accounts receivable and inventory during the first year of operations.

Earnings Management

AP11-8

Requirement 1

Increase.

The increase in accounts receivable is likely caused by the company's more relaxed credit policy and longer collection periods. The company may be having greater difficulty collecting their accounts receivable.

Yes.

An increase in accounts receivable affects net income differently than operating cash flows. An increase in accounts receivable is related to an increase in sales revenue which increases net income. However, an increase in accounts receivable has a negative effect on cash flows as this represents sales that have not been collected. In summary, an increase in accounts receivable increases net income, but decreases operating cash flows.

Requirement 2

Yes.

Salary arrangements for officers that are tied to reported net income might increase the risk of earnings management. For instance, the CEO and CFO may have an incentive to increase earnings in order to receive higher compensation. Executive compensation tied to accounting numbers is used in practice, but users of accounting information need to be aware that this increases the risk of earnings management.

Requirement 3

The positive trend in operating income compared to the negative trend in cash flows from operations.

The trends combined with the two additional events may lead Bryan to suspect the possibility of earnings management.

First, the large increase in accounts receivable can help explain the difference in trends between operating income and cash flows from operations. An increase in credit sales would explain the increase in net income. If those additional sales are not collected, supported by the large increase in accounts receivable, cash flows from operations will be lower than operating income.

The second event provides the motive. Several of the company's salary arrangements, including that of the CEO and CFO, are based on reported net income. These company executives have a direct salary incentive to overstate income.