

Using Accounting Information Exercises II

Larry M. Walther; Christopher J. Skousen



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Larry M. Walther & Christopher J. Skousen

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Problem 1

Mr. Mac Corporation has no material problem with uncollectible accounts or obsolete inventory. All sales and purchases are on account. The company provided the following information for the year ending 20X5:

Total sales	\$ 1,560,000
Beginning accounts receivable	350,000
Total purchases of inventory	1,080,000
Beginning inventory	25,000
Collections on accounts receivable	1,440,000
Payments on accounts payable	925,000
Cost of goods sold	1,065,000

- Calculate the “accounts receivable turnover ratio.”
- Calculate the “inventory turnover ratio.”
- If Mac’s competitors have a receivables turnover ratio of “7” and an inventory turnover ratio of “5,” would you initially conclude that Mac is better or worse than its competitors in managing receivables and inventory?

Worksheet 1

a)

$$\begin{aligned} & \text{Accounts Receivable Turnover Ratio} \\ & = \\ & \text{Net Credit Sales/Average Net Accounts Receivable*} \\ & = \end{aligned}$$

b)

$$\begin{aligned} & \text{Inventory Turnover Ratio} \\ & = \\ & \text{Cost of Goods Sold/Average Inventory**} \\ & = \end{aligned}$$

c)

Solution 1

a)

$$\begin{aligned}
 & \text{Accounts Receivable Turnover Ratio} \\
 & = \\
 & \text{Net Credit Sales/Average Net Accounts Receivable*} \\
 & = \\
 & \$1,560,000/[(\$350,000 + \$470,000)/2] \\
 & = \\
 & \$1,560,000/\$410,000 \\
 & = \\
 & \mathbf{3.80}
 \end{aligned}$$

* Ending accounts receivable = \$350,000 + \$1,560,000 sales - \$1,440,000 collections = \$470,000

b)

$$\begin{aligned}
 & \text{Inventory Turnover Ratio} \\
 & = \\
 & \text{Cost of Goods Sold/Average Inventory**} \\
 & = \\
 & \$1,065,000/[(\$25,000 + \$40,000)/2] \\
 & = \\
 & \$1,065,000/\$32,500 \\
 & = \\
 & \mathbf{32.77}
 \end{aligned}$$

** Ending inventory = \$25,000 + \$1,080,000 purchases - \$1,065,000 cost of goods sold = \$40,000

c) Mac is doing much better than its competitors as it relates to managing inventory (32.77 vs. 5), but is lagging behind as it relates to collecting receivables (3.80 vs. 7).

Problem 2

Beverly Monson is the chief financial officer for Monson Construction. She delivered the following comments in a recent conference call with analysts that follow the company:

“20X7 was another excellent year. Net income was a record setting \$3,500,000. We maintained our overall net profit on sales at the historic 15% level. This occurred despite an increase in raw material costs that lowered our gross margin to 45%. We are proud that we continue to maintain a healthy balance sheet that is free of any liabilities. All of our financing continues to be provided by our common and preferred shareholders. Our beginning of year equity of \$65,000,000 was sufficient to fund our capital needs, and no additional shares were issued this year. Our “4% preferred shareholders” have again received their full \$1,500,000 in dividends for the year. The remaining earnings have been reinvested in the company.”

- Use profitability ratios to determine Monson’s sales, cost of goods sold, gross profit, and net income.
- Calculate Monson’s return on assets and return on equity. Which is higher, and why?

Worksheet 2

a)

Sales
 Cost of goods sold
 Gross profit
 Selling, general & administrative
 Net income

b)

$$\begin{aligned} & \text{Return on Assets Ratio} \\ & = \\ & \frac{(\text{Net Income} + \text{Interest Expense})}{\div} \\ & \text{Average Assets} \\ & = \end{aligned}$$

$$\begin{aligned} & \text{Return on Equity Ratio} \\ & = \\ & \frac{(\text{Net Income} - \text{Preferred Dividends})}{\div} \\ & \text{Average Common Equity} \\ & = \end{aligned}$$

Solution 2

a)

Sales	100%	\$	52,500,000
Cost of goods sold	55%		28,875,000
Gross profit	45%	\$	23,625,000
Selling, general & administrative	30%		20,125,000
Net income	15%	\$	<u>3,500,000</u>

b)

$$\begin{aligned}
 & \text{Return on Assets Ratio} \\
 & = \\
 & \frac{(\text{Net Income} + \text{Interest Expense})}{\text{Average Assets}} \\
 & = \\
 & \frac{(\$3,500,000 + \$0)}{(\$65,000,000 + (\$65,000,000 + \$3,500,000 - \$1,500,000))/2} \\
 & = \\
 & \mathbf{5.303\%}
 \end{aligned}$$

$$\begin{aligned}
 & \text{Return on Equity Ratio} \\
 & = \\
 & \frac{(\text{Net Income} - \text{Preferred Dividends})}{\text{Average Common Equity}} \\
 & = \\
 & \frac{(\$3,500,000 - \$1,500,000)}{(\$27,500,000^* + (\$27,500,000 + \$3,500,000 - \$1,500,000))/2} \\
 & = \\
 & \mathbf{7.018\%}
 \end{aligned}$$

* Beginning common equity = \$65,000,000 - preferred equity (\$37,500,000) = \$27,500,000

Preferred equity = \$1,500,000 dividend ÷ 4% = \$37,500,000

Return on equity is higher than return on assets because the overall rate of return (5.303%) is higher than the 4% dividend on preferred equity. Essentially, the company is obtaining 4% financing from preferred shareholders, and deploying this capital to earn a higher rate of return. The benefit of this strategy is reflected in the higher rate of return for common shareholders.

Problem 3

The accountant for Quick Cafe used a spreadsheet to prepare information needed to prepare the statement of cash flows for the year ending December 31, 20X6. However, the data were accidentally sorted alphabetically into the following listing of items. To compound the problem, the “add” and “subtract” notations for each line item were also deleted. Review the information, and prepare a correct presentation, using the indirect approach. The beginning cash balance was \$95,700, and the ending cash balance was \$622,500.

Bought building by issuing common stock	\$	1,275,000
Decrease in accounts payable		51,000
Decrease in accounts receivable		31,500
Depreciation expense		102,000
Dividends on common		75,000
Gain on sale of land		30,000
Increase in income taxes payable		10,500
Increase in inventory		41,700
Increase in prepaid insurance		4,500
Net income		322,500
Purchase of equipment		112,500
Repayment of long-term note payable		270,000
Sale of land		645,000



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Worksheet 3

QUICK CAFÉ	
Statement of Cash Flows	
For the year ending December 31, 20X6	
Cash flows from operating activities:	
Cash flows from investing activities:	
Cash flows from financing activities:	
Net increase in cash	\$ -
Cash balance at January 1, 20X6	-
Cash balance at December 31, 20X6	<u>\$ -</u>
Noncash investing/financing activities:	<u>\$ -</u>

Solution 3

QUICK CAFÉ		
Statement of Cash Flows		
For the year ending December 31, 20X6		
Cash flows from operating activities:		
Net income		\$ 322,500
Add (deduct) noncash effects on operating income		
Depreciation expense	\$ 102,000	
Gain on sale of land	(30,000)	
Decrease in accounts receivable	31,500	
Increase in inventory	(41,700)	
Increase in prepaid insurance	(4,500)	
Decrease in accounts payable	(51,000)	
Increase in income taxes payable	10,500	16,800
Net cash provided by operating activities		\$ 339,300
Cash flows from investing activities:		
Sale of land	\$ 645,000	
Purchase of equipment	(112,500)	
Net cash provided by investing activities		532,500
Cash flows from financing activities:		
Repayment of long-term note payable	(270,000)	
Dividends on common	(75,000)	
Net cash used by financing activities		(345,000)
Net increase in cash		\$ 526,800
Cash balance at January 1, 20X6		95,700
Cash balance at December 31, 20X6		<u>\$ 622,500</u>
Noncash investing/financing activities:		
Bought building by issuing common stock		<u>\$ 1,275,000</u>

Problem 4

Cambridge Corporation reported net income of \$200,000 for 20X8. The income statement revealed sales of \$2,000,000; gross profit of \$1,040,000; selling and administrative costs of \$680,000; interest expense of \$40,000; and income taxes of \$120,000.

The selling and administrative expenses included \$50,000 for depreciation. No equipment was sold during the year. Equipment purchases were made with cash. Prepaid insurance included in the balance sheet related to administrative costs. All accounts payable included in the balance sheet relate to inventory purchases. The change in retained earnings is attributable to net income and dividends. The increase in common stock and additional paid-in capital is due to issuing additional shares for cash.

Using the direct approach, prepare a statement of cash flows (excluding the supplemental reconciliation of net income to operating cash flow) for Cambridge for the year ending December 31, 20X8. Comparative balance sheets for Cambridge follow.

CAMBRIDGE CORPORATION		
Balance Sheet		
December 31, 20X7 and 20X8		
	20X8	20X7
Assets		
Cash	\$ 917,400	\$ 942,900
Accounts receivable	398,500	343,000
Inventories	497,200	557,600
Prepaid insurance	26,000	22,000
Land	500,000	500,000
Building and equipment	3,000,000	2,600,000
Less: Accumulated depreciation	(410,000)	(360,000)
Total assets	<u>\$ 1,275,000</u>	<u>\$ 1,275,000</u>
Liabilities		
Accounts payable	\$ 171,400	\$ 186,800
Interest payable	21,000	30,000
Income taxes payable	44,000	16,000
Stockholders' equity		
Common stock	1,420,000	1,400,000
Paid in capital in excess of par	1,980,000	1,800,000
Retained earnings	1,292,700	1,172,700
Total liabilities and equity	<u>\$ 1,275,000</u>	<u>\$ 1,275,000</u>

Worksheet 4

CAMBRIDGE CORPORATION			
Statement of Cash Flows (Direct Approach)			
For the year ending December 31, 20X8			
Cash flows from operating activities:			
Cash received from customers			
Less cash paid for:		\$	-
Merchandise inventory	\$	-	
Selling and administrative expenses		-	
Interest		-	
Income taxes		-	-
Net cash provided by operating activities		\$	-
Cash flows from investing activities:			
Purchase of equipment	\$	-	
Net cash used by investing activities			-
Cash flows from financing activities:			
Proceeds from issuing stock	\$	-	
Dividends on common		-	
Net cash provided by financing activities			-
Net decrease in cash		\$	-
Cash balance at January 1, 20X8			-
Cash balance at December 31, 20X8		\$	-

Cash received from customers:

Cash paid for inventory:

Cash paid for selling and admin.:

Cash paid for interest:

Cash paid for income taxes:

Solution 4

CAMBRIDGE CORPORATION			
Statement of Cash Flows (Direct Approach)			
For the year ending December 31, 20X8			
Cash flows from operating activities:			
Cash received from customers			
Less cash paid for:		\$	1,944,500
Merchandise inventory	\$	915,000	
Selling and administrative expenses		634,000	
Interest		49,000	
Income taxes		92,000	(1,690,000)
Net cash provided by operating activities		\$	254,500
Cash flows from investing activities:			
Purchase of equipment		\$	(400,000)
Net cash used by investing activities			(400,000)
Cash flows from financing activities:			
Proceeds from issuing stock		\$	200,000
Dividends on common			(80,000)
Net cash provided by financing activities			120,000
Net decrease in cash		\$	(25,500)
Cash balance at January 1, 20X8			942,900
Cash balance at December 31, 20X8		\$	917,400

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Cash received from customers: Sales - Increase in Receivables

$$\$2,000,000 - (\$389,500 - \$343,000) = \$1,944,500$$

Cash paid for inventory: COGS - Decrease in Inventory + Decrease in Payables

$$(\$2,000,000 - \$1,040,000) - (\$557,600 - \$497,200) + (\$186,800 - \$171,400) = \$915,000$$

Cash paid for selling and admin.: Selling/Admin - Depreciation + Increase in Prepaids

$$\$680,000 - \$50,000 + (\$26,000 - \$22,000) = \$634,000$$

Cash paid for interest: Interest Expense + Decrease in Interest Payable

$$\$40,000 + (\$30,000 - \$21,000) = \$49,000$$

Cash paid for income taxes: Income Tax Expense - Increase in Taxes Payable

$$\$120,000 - (\$44,000 - \$16,000) = \$92,000$$

Problem 5

Cambridge Corporation reported net income of \$200,000 for 20X8. The income statement revealed sales of \$2,000,000; gross profit of \$1,040,000; selling and administrative costs of \$680,000; interest expense of \$40,000; and income taxes of \$120,000.

The selling and administrative expenses included \$50,000 for depreciation. No equipment was sold during the year. Equipment purchases were made with cash. Prepaid insurance included in the balance sheet related to administrative costs. All accounts payable included in the balance sheet relate to inventory purchases. The change in retained earnings is attributable to net income and dividends. The increase in common stock and additional paid-in capital is due to issuing additional shares for cash.

Using the indirect approach, prepare a statement of cash flows for Cambridge for the year ending December 31, 20X8. Comparative balance sheets for Cambridge follow.

CAMBRIDGE CORPORATION		
Balance Sheet		
December 31, 20X7 and 20X8		
	20X8	20X7
Assets		
Cash	\$ 917,400	\$ 942,900
Accounts receivable	398,500	343,000
Inventories	497,200	557,600
Prepaid insurance	26,000	22,000
Land	500,000	500,000
Building and equipment	3,000,000	2,600,000
Less: Accumulated depreciation	(410,000)	(360,000)
Total assets	<u>\$ 4,929,100</u>	<u>\$ 4,605,500</u>
Liabilities		
Accounts payable	\$ 171,400	\$ 186,800
Interest payable	21,000	30,000
Income taxes payable	44,000	16,000
Stockholders' equity		
Common stock	1,420,000	1,400,000
Paid in capital in excess of par	1,980,000	1,800,000
Retained earnings	1,292,700	1,172,700
Total liabilities and equity	<u>\$ 4,929,100</u>	<u>\$ 4,605,500</u>

Worksheet 5

CAMBRIDGE CORPORATION		
Statement of Cash Flows (Indirect Approach)		
For the year ending December 31, 20X8		
Cash flows from operating activities:		
Net income		\$ -
Add (deduct) noncash effects on operating income		
Depreciation expense	\$ -	
Increase in accounts receivable	-	
Decrease in inventory	-	
Increase in prepaid insurance	-	
Decrease in accounts payable	-	
Decrease in interest payable	-	
Increase in income taxes payable	-	-
Net cash provided by operating activities		\$ -
Cash flows from investing activities:		
Purchase of equipment	\$ -	
Net cash used by investing activities		-
Cash flows from financing activities:		
Proceeds from issuing stock	\$ -	
Dividends on common	-	
Net cash provided by financing activities		-
Net decrease in cash		\$ -
Cash balance at January 1, 20X8		-
Cash balance at December 31, 20X8		\$ -

Solution 5

CAMBRIDGE CORPORATION		
Statement of Cash Flows (Indirect Approach)		
For the year ending December 31, 20X8		
Cash flows from operating activities:		
Net income		\$ 200,000
Add (deduct) noncash effects on operating income		
Depreciation expense	\$ 915,000	
Increase in accounts receivable	(55,500)	
Decrease in inventory	60,400	
Increase in prepaid insurance	(4,000)	
Decrease in accounts payable	(15,400)	
Decrease in interest payable	(9,000)	
Increase in income taxes payable	28,000	54,500
Net cash provided by operating activities		\$ 254,500
Cash flows from investing activities:		
Purchase of equipment	\$ (400,000)	
Net cash used by investing activities		(400,000)
Cash flows from financing activities:		
Proceeds from issuing stock	\$ 200,000	
Dividends on common	(80,000)	
Net cash provided by financing activities		120,000
Net decrease in cash		\$ (25,500)
Cash balance at January 1, 20X8		942,900
Cash balance at December 31, 20X8		<u>\$ 917,400</u>

Problem 6

Smithson Corporation's stock is selling for \$36 per share. Smithson provided the following financial statements. Use these statements to prepare a comprehensive ratio analysis. The blank worksheet includes a table of the ratios you should calculate.

SMITHSON CORPORATION		
Comparative Balance Sheet		
December 31, 20X8 and 20X7		
ASSETS	20X8	20X7
Current assets		
Cash	\$ 1,200,000	\$ 740,000
Accounts receivable	1,050,000	580,000
Inventories	270,000	220,000
Total current assets	<u>\$ 2,520,000</u>	<u>\$ 1,540,000</u>
Property, plant & equip.		
Land	\$ 600,000	\$ 400,000
Building	1,950,000	1,300,000
Equipment	3,150,000	1,800,000
	<u>\$ 5,700,000</u>	<u>\$ 1,750,000</u>
Less: Accumulated depreciation	(1,095,000)	(650,000)
Total property, plant & equipment	<u>\$ 4,605,000</u>	<u>\$ 1,425,000</u>
Total assets	<u><u>\$ 7,125,000</u></u>	<u><u>\$ 2,965,000</u></u>
LIABILITIES		
Current liabilities		
Accounts payable	\$ 480,000	\$ 400,000
Interest payable	150,000	60,000
Total current liabilities	<u>\$ 630,000</u>	<u>\$ 230,000</u>
Long-term liabilities		
Long-term note payable	2,400,000	1,400,000
Total liabilities	<u>\$ 3,030,000</u>	<u>\$ 930,000</u>
STOCKHOLDERS' EQUITY		
Common stock (\$0.50 par)	\$ 100,000	\$ 100,000
Paid-in capital in excess of par	655,000	655,000
Retained earnings	3,340,000	1,280,000
Total stockholders' equity	<u>\$ 4,095,000</u>	<u>\$ 2,035,000</u>
Total liabilities and equity	<u><u>\$ 7,125,000</u></u>	<u><u>\$ 2,965,000</u></u>

SMITHSON CORPORATION		
Income Statement		
For the Year Ending December 31, 20X8		
Revenues		\$ 10,110,000
Cost of goods sold		5,762,500
Gross profit		<u>\$ 4,347,500</u>
Operating Expenses		
Salaries	\$ 735,000	
Interest	195,000	
Depreciation	445,000	
Other operating expenses	462,500	1,837,500
Income before income taxes		<u>\$ 2,510,000</u>
Less: Income taxes		300,000
Net income		<u><u>\$ 2,210,000</u></u>

SMITHSON CORPORATION		
Statement of Retained Earnings		
For the Year Ending December 31, 20X8		
Beginning retained earnings, January 1		\$ 1,280,000
Plus: Net income		2,210,000
		<u>\$ 3,490,000</u>
Less: Dividends		150,000
Ending retained earnings, December 31		<u><u>\$ 3,340,000</u></u>

Worksheet 6

Current Ratio

4.00

Current Assets ÷ Current Liabilities

\$2,520,000 ÷ \$630,000

Quick Ratio

Debt to Total Assets Ratio

Debt to Total Equity Ratio

Times Interest Earned Ratio

Accounts Receivable Turnover Ratio

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Inventory Turnover Ratio

Net Profit on Sales

Gross Profit Margin

Return on Assets

Return on Equity

EPS

P/E

Dividend Rate/Yield

Dividend Payout Ratio

Book Value Per Share

Solution 6

Current Ratio	4.00
Current Assets ÷ Current Liabilities	\$2,520,000 ÷ \$630,000
Quick Ratio	3.57
(Cash + Short-term Investments + Accounts Receivable) ÷ Current Liabilities	\$2,250,000 ÷ \$630,000
Debt to Total Assets Ratio	0.43
Total Debt ÷ Total Assets	\$3,030,000 ÷ \$7,125,000
Debt to Total Equity Ratio	0.74
Total Debt ÷ Total Equity	\$3,030,000 ÷ \$4,095,000
Times Interest Earned Ratio	12.87
"Income Before Income Taxes and Interest ÷ Interest Charges"	\$2,510,000 ÷ \$195,000

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Accounts Receivable Turnover Ratio	12.40
"Net Credit Sales ÷ Average Net Accounts Receivable"	\$10,110,000 ÷ \$815,000
Inventory Turnover Ratio	23.52
Cost of Goods Sold ÷ Average Inventory	\$5,762,500 ÷ \$245,000
Net Profit on Sales	21.86%
Net Income ÷ Net Sales	\$2,210,000 ÷ \$10,110,000
Gross Profit Margin	43.00%
Gross Profit ÷ Net Sales	\$4,347,500 ÷ \$10,110,000
Return on Assets	47.67%
"(Net Income + Interest Expense) ÷ Average Assets"	\$2,405,000 ÷ \$5,045,000
Return on Equity	72.10%
"(Net Income - Preferred Dividends) ÷ Average Common Equity"	\$550,000 ÷ \$3,065,000
EPS	\$11.05
"Income Available to Common ÷ Weighted-Average Number of Common Shares"	\$2,210,000 ÷ 200,000
P/E	3.26
"Market Price Per Share ÷ Earnings Per Share"	\$36.00 ÷ \$11.05
Dividend Rate/Yield	2.08%
"Annual Cash Dividend ÷ Market Price Per Share"	(\$150,000/200,000) ÷ \$36.00
Dividend Payout Ratio	6.79%
"Annual Cash Dividend ÷ Earnings Per Share"	(\$150,000/200,000) ÷ \$11.05
Book Value Per Share	\$20.48
"Common Equity ÷ Common Shares Outstanding"	\$4,095,000 ÷ 200,000

Problem 7

Dursteler Systems presented the following comparative balance sheet:

DURSTELER SYSTEMS		
Balance Sheet		
December 31, 20X7 and 20X8		
	20X8	20X7
Assets		
Cash	\$ 504,150	\$ 108,975
Accounts receivable	164,700	131,700
Inventories	175,875	237,675
Land	975,000	225,000
Building and equipment	675,000	642,000
Less: Accumulated depreciation	(376,350)	(326,250)
Total assets	<u>\$ 2,118,375</u>	<u>\$ 1,019,100</u>
Liabilities		
Accounts payable	\$ 83,325	\$ 70,050
Utilities payable	1,875	3,000
Interest payable	3,750	-
Long-term note payable	750,000	-
Stockholders' equity	-	\$ -
Common stock, \$1 par	225,000	187,500
Paid in capital in excess of par	420,000	337,500
Retained earnings	634,425	421,050
Total liabilities and equity	<u>\$ 2,118,375</u>	<u>\$ 1,019,100</u>

Additional information about transactions and events occurring in 20X8 is as follows:

Dividends of \$79,275 were declared and paid.

Accounts payable and accounts receivable relate solely to purchases and sales of inventory.

The increase in land resulted from the purchase of land via issuance of the long-term note payable. No buildings were purchased or sold. Equipment was purchased.

In January of 20X8, equipment with an original cost of \$56,250 was sold for \$37,500.

The increase in paid-in capital all resulted from issuing additional shares for cash.

The income statement for the year ending 20X8 follows:

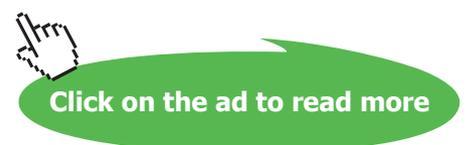
DUSTELER COMPUTER SYSTEMS		
Income Statement		
For the Year Ending December 31, 20X8		
Sales		\$ 2,142,000
Cost of goods sold		1,182,225
Gross profit		<u>\$959,775</u>
Operating expenses and other		
Salaries	\$ 325,125	
Utilities	48,150	
Interest	45,000	
Depreciation	57,600	
Loss on sale of equipment	11,250	487,125
Income before income tax		<u>472,650</u>
Income tax		180,000
Net income		<u><u>\$ 292,650</u></u>

Prepare Travis Engineering’s statement of cash flows for the year ending 20X8. Use the direct approach, and prepare the supplement reconciliation of net income to operating cash flows.

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Worksheet 7

DURSTELER SYSTEMS		
Statement of Cash Flows		
For the year ending December 31, 20X8		
Cash flows from operating activities:		
Cash received from customers		\$ -
Less cash paid for:		
Merchandise inventory	\$ -	
Salaries	-	
Utilities	-	
Interest	-	
Income taxes	-	-
Net cash provided by operating activities		\$ -
Cash flows from investing activities:		
Sale of equipment	\$ -	
Purchase of equipment	-	
Net cash used by investing activities		-
Cash flows from financing activities:		
Proceeds from issuing stock	\$ -	
Dividends on common	-	
Net cash provided by financing activities		-
Net increase in cash		\$ -
Cash balance at January 1, 20X8		108,975
Cash balance at December 31, 20X8		\$ -
Noncash investing/financing activities		
Issued note payable for land		\$ -

Reconciliation of net income to cash flows from operating activities:		
Net income		\$ 292,650
Add (deduct) noncash effects on operating income		
Depreciation expense	\$ -	
Loss on sale of equipment	-	
Increase in accounts receivable	-	
Decrease in inventory	-	
Increase in accounts payable	-	
Decrease in utilities payable	-	
Increase in interest payable	-	-
Net cash provided by operating activities		\$ -

Solution 7

DURSTELER SYSTEMS		
Statement of Cash Flows		
For the year ending December 31, 20X8		
Cash flows from operating activities:		
Cash received from customers		\$ 2,109,000
Less cash paid for:		
Merchandise inventory	\$ 1,107,150	
Salaries	325,125	
Utilities	49,275	
Interest	41,250	
Income taxes	180,000	(1,702,800)
Net cash provided by operating activities		\$ 406,200
Cash flows from investing activities:		
Sale of equipment	\$ 37,500	
Purchase of equipment	(89,250)	
Net cash used by investing activities		(51,750)
Cash flows from financing activities:		
Proceeds from issuing stock	\$ 120,000	
Dividends on common	(79,275)	
Net cash provided by financing activities		40,725
Net increase in cash		\$ 395,175
Cash balance at January 1, 20X8		108,975
Cash balance at December 31, 20X8		<u>\$ 504,150</u>
Noncash investing/financing activities		
Issued note payable for land		<u>\$ 750,000</u>

Reconciliation of net income to cash flows from operating activities:		
Net income		\$ 292,650
Add (deduct) noncash effects on operating income		
Depreciation expense	\$ 57,600	
Loss on sale of equipment	11,250	
Increase in accounts receivable	(33,000)	
Decrease in inventory	61,800	
Increase in accounts payable	13,275	
Decrease in utilities payable	(1,125)	
Increase in interest payable	3,750	113,550
Net cash provided by operating activities		\$ 406,200

Cash received from customers: Sales - Increase in Receivables

$$\$2,142,000 - (\$164,700 - \$131,700) = \$2,109,000$$

Cash paid for inventory: COGS - Decrease in Inventory - Increase in Payables

$$\$1,182,225 - (\$237,675 - \$175,875) - (\$83,325 - \$70,050) = \$1,107,150$$

Cash paid for utilities: Utilities Expense + Decrease in Utilities Payable

$$\$48,150 + (\$3,000 - \$1,875) = \$49,275$$

Cash paid for interest: Interest Expense - Increase in Interest Payable

$$\$45,000 - \$3,750 = \$41,250$$

Cash paid for equipment: Ending Balance + Cost of Item Sold - Beginning Balance

$$\$675,000 + \$56,250 - \$642,000 = \$89,250$$

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Problem 8

Cutler Design presented the following comparative balance sheet:

CUTLER DESIGN CORPORATION		
Comparative Balance Sheet		
December 31, 20X9 and 20X8		
ASSETS	20X9	20X8
Current assets		
Cash	\$ 1,162,000	\$ 15,750
Accounts receivable	656,250	603,750
Inventories	262,500	280,000
Prepaid expenses	61,250	43,750
Total current assets	<u>\$ 2,142,000</u>	<u>\$ 943,250</u>
Property, plant & equip.		
Land	\$ 525,000	\$ 700,000
Building	1,225,000	1,225,000
Equipment	927,500	787,500
	<u>\$ 2,677,500</u>	<u>\$ 2,712,500</u>
Less: Accumulated depreciation	(525,000)	(472,500)
Total property, plant & equipment	<u>\$ 2,152,500</u>	<u>\$ 2,240,000</u>
Total assets	<u>\$ 4,294,500</u>	<u>\$ 3,183,250</u>
LIABILITIES		
Current liabilities		
Accounts payable	\$ 196,000	\$ 208,250
Interest payable	3,500	-
Total current liabilities	<u>\$ 199,500</u>	<u>\$ 208,250</u>
Long-term liabilities		
Long-term note payable	140,000	-
Total liabilities	<u>\$ 339,500</u>	<u>\$ 208,250</u>
STOCKHOLDERS' EQUITY		
Common stock (\$1 par)	\$ 1,225,000	\$ 1,050,000
Paid-in capital in excess of par	1,400,000	700,000
Retained earnings	1,330,000	1,225,000
Total stockholders' equity	<u>\$ 3,955,000</u>	<u>\$ 2,975,000</u>
Total Liabilities and equity	<u>\$ 4,294,500</u>	<u>\$ 3,183,250</u>

Additional information about transactions and events occurring in 20X9 follows:

Dividends of \$96,250 were declared and paid.

Accounts payable and accounts receivable relate solely to purchases and sales of inventory. Prepaid items related only to advertising expenses.

The decrease in land resulted from the sale of a parcel at a \$78,750 gain. No land was purchased during the year. Equipment was purchased during the year in exchange for a promissory note payable. No equipment was sold.

The increase in paid-in capital resulted from issuing additional shares for cash.

The income statement for the year ending December 31, 20X9, included the following key amounts:

Sales	\$ 3,500,000
Cost of goods sold	2,100,000
Salaries expense	700,000
Advertising expense	262,500
Depreciation expense	52,500
Utilities expense	26,250
Interest expense	8,750
Gain on sale of land	78,750
Income tax expense	70,000
Net income	201,250

Prepare Cutler Design's statement of cash flows for the year ending 20X9. Use the indirect approach, and include required supplemental information about cash paid for interest and taxes.

Solution 8

CUTLER DESIGN CORPORATION		
Statement of Cash Flows		
For the year ending December 31, 20X9		
Cash flows from operating activities:		
Net income		\$ 201,250
Add (deduct) noncash effects on operating income		
Depreciation expense	\$ 52,500	
Gain on sale of equipment	(78,750)	
Increase in accounts receivable	(52,500)	
Decrease in inventory	17,500	
Increase in prepaid expenses	(17,500)	
Decrease in accounts payable	(12,250)	
Increase in interest payable	3,500	(87,500)
Net cash provided by operating activities		\$ 113,750
Cash flows from investing activities:		
Sale of land	\$ 253,750	
Net cash provided by investing activities		253,750
Cash flows from financing activities:		
Proceeds from issuing stock	\$ 875,000	
Dividends on common	(96,250)	
Net cash provided by financing activities		778,750
Net increase in cash		\$ 1,146,250
Cash balance at January 1, 20X9		15,750
Cash balance at December 31, 20X9		<u>\$ 1,162,000</u>
Noncash investing/financing activities:		
Issued note payable for equipment		<u>\$ 140,000</u>
Supplemental information:		
Cash paid for interest		\$ 5,250
Cash paid for taxes		70,000