

## CHAPTER REVIEW AND SELF-TEST PROBLEM

**Cash Flow for Rasputin Corporation.** This problem will give you some practice working with financial statements and figuring cash flow. Based on the following information for Rasputin Corporation, prepare an income statement for 2014 and balance sheets for 2013 and 2014. Next, following our U.S. Corporation examples in the chapter, calculate cash flow from assets for Rasputin, cash flow to creditors, and cash flow to stockholders for 2014. Use a 34 percent tax rate throughout. You can check your answers below.

	2013	2014
Sales	\$3,790	\$3,990
Cost of goods sold	2,043	2,137
Depreciation	975	1,018
Interest	225	267
Dividends	200	225
Current assets	2,140	2,346
Net fixed assets	6,770	7,087
Current liabilities	994	1,126
Long-term debt	2,869	2,956

### Answer to Chapter Review and Self-Test Problem 2.1

In preparing the balance sheets, remember that shareholders' equity is the residual. With this in mind, Rasputin's balance sheets are as follows:

RASPUTIN CORPORATION					
Balance Sheets as of December 31, 2013 and 2014					
	2013	2014		2013	2014
Current assets	\$2,140	\$2,346	Current liabilities	\$ 994	\$1,126
Net fixed assets	<u>6,770</u>	<u>7,087</u>	Long-term debt	2,869	2,956
			Equity	<u>5,047</u>	<u>5,351</u>
			Total liabilities and shareholders' equity	<u>\$8,910</u>	<u>\$9,433</u>
Total assets	<u>\$8,910</u>	<u>\$9,433</u>			

The income statement is straightforward:

RASPUTIN CORPORATION	
2014 Income Statement	
Sales	\$3,990
Cost of goods sold	2,137
Depreciation	<u>1,018</u>
Earnings before interest and taxes	\$ 835
Interest paid	<u>267</u>
Taxable income	\$ 568
Taxes (34%)	<u>193</u>
Net income	<u>\$ 375</u>
Dividends	\$225
Addition to retained earnings	150

Notice that we've used a flat 34 percent tax rate. Also, notice that the addition to retained earnings is just net income less cash dividends.

We can now pick up the figures we need to get operating cash flow:

<b>RASPUTIN CORPORATION</b> <b>2014 Operating Cash Flow</b>	
Earnings before interest and taxes	\$ 835
+ Depreciation	1,018
- Current taxes	193
Operating cash flow	<u><u>\$1,660</u></u>

Next, we get the capital spending for the year by looking at the change in fixed assets, remembering to account for the depreciation:

Ending fixed assets	\$7,087
- Beginning fixed assets	6,770
+ Depreciation	1,018
Net investment in fixed assets	<u><u>\$1,335</u></u>

After calculating beginning and ending NWC, we take the difference to get the change in NWC:

Ending NWC	\$1,220
- Beginning NWC	1,146
Change in NWC	<u><u>\$ 74</u></u>

We now combine operating cash flow, net capital spending, and the change in net working capital to get the total cash flow from assets:

<b>RASPUTIN CORPORATION</b> <b>2014 Cash Flow from Assets</b>	
Operating cash flow	\$1,660
- Net capital spending	1,335
- Change in NWC	74
Cash flow from assets	<u><u>\$ 251</u></u>

To get cash flow to creditors, notice that long-term borrowing increased by \$87 during the year and that interest paid was \$267, so:

RASPUTIN CORPORATION 2014 Cash Flow to Creditors	
Interest paid	\$267
- Net new borrowing	<u>87</u>
Cash flow to creditors	<u>\$180</u>

Finally, dividends paid were \$225. To get net new equity, we have to do some extra calculating. Total equity was up by  $\$5,351 - 5,047 = \$304$ . Of this increase, \$150 was from additions to retained earnings, so \$154 in new equity was raised during the year. Cash flow to stockholders was thus:

RASPUTIN CORPORATION 2014 Cash Flow to Stockholders	
Dividends paid	\$225
- Net new equity	<u>154</u>
Cash flow to stockholders	<u>\$ 71</u>

As a check, notice that cash flow from assets (\$251) does equal cash flow to creditors plus cash flow to stockholders ( $\$180 + 71 = \$251$ ).