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Income statement:

	<u>\$ Millions</u>
Net sales	\$170.00
Cost of goods sold	130.00
Selling, general, & administrative expenses	10.00
Depreciation	<u>20.00</u>
EBIT	10.00
Interest expense	<u>1.25</u>
Income before tax	8.75
Tax	<u>3.0625</u>
Net income	\$5.6875

Balance sheet:

	<u>\$ Millions</u>	
	<i>This Year</i>	<i>Last Year</i>
Assets		
Cash and marketable securities	\$ 11	\$ 20
Receivables	44	34
Inventories	<u>22</u>	<u>26</u>
Total current assets	77	80
Net property, plant, equipment	<u>38</u>	<u>25</u>
Total assets	\$115	\$105
Liabilities & shareholders' equity		
Accounts payable	\$ 25	\$ 20
Notes payable	<u>30</u>	<u>35</u>
Total current liabilities	55	55
Long-term debt	24	20
Shareholders' equity	<u>36</u>	<u>30</u>
Total liabilities & shareholders' equity	\$115	\$105

Solution procedure:

1. Total current liabilities = $25 + 30 = 55$
2. Total current assets = $55 \times 1.4 = 77$
3. Cash = $55 \times 0.2 = 11$
4. Accounts receivable + cash = $55 \times 1.0 = 55$
5. Accounts receivable = $55 - \text{cash} = 55 - 11 = 44$
6. Inventories = $77 - 11 - 44 = 22$
7. Total assets = total liabilities and shareholders' equity = 115
8. Net property, plant, equipment = $115 - 77 = 38$

9. $\text{Sales} = (365/\text{avg. collection period}) \times \text{beginning receivables}$
 $= (365/73) \times 34 = 170$
10. $\text{Cost of goods sold} = \text{inventory turnover} \times \text{beginning inventory}$
 $= 5.0 \times 26 = 130$
11. $\text{EBIT} = 170 - 130 - 10 - 20 = 10$
12. $\text{Interest} = \text{EBIT}/\text{times interest earned} = 10/8 = 1.25$
13. $\text{Tax} = (\text{EBIT} - \text{interest}) \times 0.35 = (10 - 1.25) \times 0.35 = 3.0625$
14. $\text{Net income} = \text{EBIT} - \text{interest} - \text{tax} = 10 - 1.25 - 3.0625 = 5.6875$
15. $\text{LT debt} = \text{LT debt ratio} \times (\text{total assets} - \text{current liabilities})$
 $= 0.4 \times (115 - 55) = 0.4 \times 60 = 24$
16. $\text{Shareholders' equity} = 60 - 24 = 36$