**Req. 1**

The rate of inventory turnover for 2014 is 3.76 times.

\[
\text{Inventory turnover} = \frac{\text{Cost of sales}}{\text{Average inventory}} = \frac{\$28.4}{\frac{\$6.9 + \$8.2}{2}} = \frac{\$28.4}{\$7.55} = 3.76 \text{ times}
\]

The days in inventory for 2014 is 97 days.

\[
\frac{365 \text{ days}}{3.76} = 97 \text{ days}
\]

The gross profit percentage for 2014 is 43.4%.

\[
\frac{(50.2 - 28.4)}{50.2} = 0.434
\]

**Req. 2**

Days’ sales in average receivables:

\[
\text{One day’s sales} = \frac{\text{Net sales}}{365} = \frac{\$50.2}{365} = \$0.1375
\]

Average net receivables

\[
\text{Days’ sales in average receivables} = \frac{\text{Average net receivables}}{\text{One day’s sales}} = \frac{\$6.35^*}{\$0.1375} = 46 \text{ days}
\]

\[
^*\frac{($7.4 + $5.3)}{2} = $6.35
\]

Days’ sales in average receivables during 2014 is 46 days.

**Req. 1**

**(5 min.) S18-7**

(Dollar amounts in millions)

Debt ratio

\[
\text{Debt ratio} = \frac{\text{Total liabilities}}{\text{Total assets}} = \frac{\$45.3}{\$88.3} = 0.513
\]
Win’s debt ratio is 51.3%.

\[
\text{Debt to equity ratio} = \frac{\text{Total liabilities}}{\text{Total equity}} = \frac{\$45.3}{\$43.0} = 1.05
\]

Win’s debt to equity ratio is 1.05.

**Req. 2**

The company’s ability to pay its liabilities appears *strong* since the debt ratio is *fairly low*.

---

**Req. 1**

*(Dollar amounts in millions)*

The rate of return on net sales is 30.9%.

a. Rate of return on net sales

\[
\text{Rate of return on net sales} = \frac{\text{Profit}}{\text{Net sales}} = \frac{\$15.5}{\$50.2} = 0.309
\]

**Req. 2**

The rate of return on total assets is 27.2%.

b. Rate of return on total assets

\[
\text{Rate of return on total assets} = \frac{\text{Profit \ bef. tax} + \text{expense}}{\text{Average total assets}} = \frac{\$15.5 + \$3.0 + \$0.5}{\frac{\$88.3 + \$51.2}{2}} = 0.272
\]

**Req. 3**

The asset turnover ratio is 0.72 times.

\[
\text{Asset turnover ratio} = \frac{\text{Net sales}}{\text{Average total assets}} = \frac{\$50.2}{\frac{\$88.3 + \$51.2}{2}} = 0.72
\]

**Req. 4**

The rate of return on ordinary shareholders’ equity is 44.0%.
Rate of return on ordinary shareholders' equity = \[ \frac{\text{Prefer. Profit} - \text{dividends}}{\text{Average ordinary shareholders' equity}} \]

\[ \frac{15.5 - 0}{(43.0 + 27.5) / 2} = 0.440 \]

**Req. 5**

These rates of return are strong considering that the average for companies is much lower rates of return.

**Req. 1**

Win's EPS is $31.00.

\[ \frac{\text{Profit} - \text{Preference dividends}}{\text{Number of ordinary shares outstanding}} = \frac{15.5 - 0}{0.5} = 31.00 \]

**Req. 2**

Win's P/E ratio is 2.21 times.

\[ \frac{\text{Market price per share}}{\text{EPS}} = \frac{68.50}{31.00} = 2.21 \]

**Req. 1**

### Balance Sheet

(Amounts in thousands)

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$75</td>
</tr>
<tr>
<td>Receivables</td>
<td>685(a)</td>
</tr>
<tr>
<td>Inventories</td>
<td>725</td>
</tr>
<tr>
<td>Prepaid expenses</td>
<td>35(b)</td>
</tr>
<tr>
<td>Plant and equipment, net</td>
<td>3280(d)</td>
</tr>
<tr>
<td>Other assets</td>
<td>2000</td>
</tr>
<tr>
<td><strong>Total current assets</strong></td>
<td>$1520(c)</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>$1900</td>
</tr>
<tr>
<td><strong>Long-term loan payable</strong></td>
<td>1595(e)</td>
</tr>
<tr>
<td><strong>Other long-term liabilities</strong></td>
<td>980</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td>4475</td>
</tr>
<tr>
<td><strong>Shareholders’ equity</strong></td>
<td>2325</td>
</tr>
<tr>
<td><strong>Total liabilities and shareholders’ equity</strong></td>
<td>800(f)</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td>$6800</td>
</tr>
</tbody>
</table>

Calculate items in order shown below:
\[(f) = \$6\,800 \text{ (same as total assets)}\]

\[(e) = \$6\,800 - \$2\,325 - \$980 - \$1\,900 = \$1\,595\]

\[(c) = \$1\,900 \times 0.80 = \$1\,520\]

\[(a) = \$1\,900 \times 0.40 = \$760; \$760 - \$75 = \$685\]

\[(b) = \$1\,520 - \$75 - \$685 - \$725 = \$35\]

\[(d) = \$6\,800 - \$1\,520 - \$2\,000 = \$3\,280\]

\[\text{(10-15 min.) E18-5}\]

Req. 1

Mariner Designs Ltd
Comparative Common-Size Income Statement
For the Years 31 Ended December 2014 and 2013

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales revenue</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of sales</td>
<td>46.4%</td>
<td>50.4%</td>
</tr>
<tr>
<td>Selling and general expenses</td>
<td>23.0%</td>
<td>24.5%</td>
</tr>
<tr>
<td>Other expense</td>
<td>1.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>Total expenses</td>
<td>71.3%</td>
<td>76.7%</td>
</tr>
<tr>
<td>Profit</td>
<td>28.7%</td>
<td>23.3%</td>
</tr>
</tbody>
</table>

An investor would be pleased with 2014 in comparison with 2013. Cost of sales and selling and general expenses—the two largest expenses—consumed smaller percentages of net sales revenue in 2014, and thus profit represents a higher percentage of net sales revenue. Overall, profits are rising.

\[\text{(10-15 min.) E18-9}\]

 Req. 1

2014 | 2013
---|---
Price/earnings ratio: | |
\[\frac{\$19.50}{(\$61\,000 - \$12\,600^*)/80000} = \frac{32.23}{(\$52\,000 - \$12\,600)/80000} = \frac{\$14}{(\$52\,000 - \$12\,600)/80000} = 28.43\]

\[*210\,000 \times .06 = \$12\,600\]

Dividend yield:
$26,000 / 80,000 = \frac{1.7\%}{19.50} \quad \text{or} \quad \frac{2.3\%}{14} \quad \text{or} \quad \frac{$26,000}{80,000} = \frac{53.7\%}{($61,000-12,600)/80,000} = 66.0\%

Dividend payout on ordinary shares:

\[
\frac{26,000}{80,000} - \frac{6,880}{80,000} = 6.88 \quad \text{or} \quad \frac{610,000 - 210,000}{80,000} = 5.00
\]

Book value per share:

The share’s attractiveness increased during 2014, as shown by the increases in the price/earnings ratio and in book value per share. The dividend yield and dividend payout decreased, but that would be important only to investors who want dividends. Overall, the ordinary share looks more attractive than it did a year ago.