Requirements 1

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$9,575</td>
<td>$9,300</td>
<td>$8,975</td>
<td></td>
<td>$275</td>
<td>3.0%</td>
<td>$325</td>
<td>3.6%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>6,000</td>
<td>5,975</td>
<td>5,900</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gross profit</td>
<td>$3,575</td>
<td>$3,325</td>
<td>$3,075</td>
<td></td>
<td>$250</td>
<td>7.5%</td>
<td>$250</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

Requirements 2

Profit increased faster than revenues.

Requirements 1

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2012</th>
<th>2011</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>$9,910</td>
<td>$9,700</td>
<td>$9,210</td>
<td>$9,110</td>
</tr>
<tr>
<td>Trend percentage</td>
<td>109%</td>
<td>106%</td>
<td>101%</td>
<td>100%</td>
</tr>
<tr>
<td>Profit</td>
<td>$7,475</td>
<td>$7,400</td>
<td>$5,495</td>
<td>$4,690</td>
</tr>
<tr>
<td>Trend percentage</td>
<td>159%</td>
<td>158%</td>
<td>117%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Requirements 1

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables</td>
<td>$54,530</td>
<td>26.6%</td>
</tr>
<tr>
<td>Inventory</td>
<td>42,435</td>
<td>20.7%</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>108,035</td>
<td>52.7%</td>
</tr>
<tr>
<td>Total assets</td>
<td>$205,000</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and receivables</td>
<td>$46,860</td>
<td>28.4%</td>
</tr>
<tr>
<td>Inventory</td>
<td>32,670</td>
<td>19.8%</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>85,470</td>
<td>51.8%</td>
</tr>
<tr>
<td>Total assets</td>
<td>$165,000</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Requirements 1

<table>
<thead>
<tr>
<th></th>
<th>Muller</th>
<th>Rose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net sales</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>60.9%</td>
<td>72.7%</td>
</tr>
<tr>
<td>Other expenses</td>
<td>33.4%</td>
<td>22.5%</td>
</tr>
<tr>
<td>Profit</td>
<td>5.7%</td>
<td>4.8%</td>
</tr>
</tbody>
</table>
Req. 2

Rose earns more profit.

Req. 3

Muller’s profit is a higher percentage of its net sales.

(5-10 min.) S18-5

Req. 1

The current ratio is 1.65 for 2014 and 1.92 for 2013.

\[
\begin{array}{lcc}
\text{(Dollar amounts in millions)} & 2014 & 2013 \\
\hline
\text{Total current assets} & \$54.3 & \$25.2 \\
\text{Total current liabilities} & \$33.0 & \$13.1 \\
\hline
\end{array}
\]

\[
\text{Current ratio} = \frac{\text{Total current assets}}{\text{Total current liabilities}} = \frac{\$54.3}{\$33.0} = 1.65 \quad \text{and} \quad \frac{\$25.2}{\$13.1} = 1.92
\]

(10-15 min.) S18-6

Req. 2

Win’s Companies’ current ratio deteriorated.

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.
(365 days / 3.76)

The gross profit percentage for 2014 is 43.4%.
(50.2 – 28.4) / 50.2 = 0.434
Req. 2

*(Dollar amounts in millions)*

Days’ sales in average receivables:

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

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

\(\frac{\$7.4 + \$5.3}{2} = \$6.35\)

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

Req. 1

(10-15 min.) E18-6

a. The current ratio is *1.29*.

\[
\text{Current ratio} = \frac{\$172 000}{\$133 000} = 1.29
\]

b. The acid test ratio is *0.60*.

\[
\text{Acid-test (quick) ratio} = \frac{\$15 000 + \$11 000 + \$54 000}{\$133 000} = 0.60
\]

c. The inventory turnover is *4.32 times*.

\[
\text{Inventory turnover} = \frac{\$315 000}{\left(\frac{\$77 000 + \$69 000}{2}\right)} = 4.32 \text{ times}
\]

d. The days in inventory for the current year is *84 days*.

\[
\text{One day’s sales} = \frac{365 \text{ days}}{4.32 \text{ times}} = 84
\]

e. The days’ sales in receivables is *50 days*.

\[
\text{One day’s sales} = \frac{\$462 000}{365 \text{ days}} = \$1 265.75
\]
f. The gross profit percentage for the current year is 31.8%.

\[
\text{Gross profit percentage} = \frac{\$462\,000 - \$315\,000}{\$462\,000} = 31.8
\]