7.RP Selling Computers

Alignments to Content Standards:  7.RP.A.3

Task

The sales team at an electronics store sold 48 computers last month. The manager at the store wants to encourage the sales team to sell more computers and is going to give all the sales team members a bonus if the number of computers sold increases by 30% in the next month. How many computers must the sales team sell to receive the bonus? Explain your reasoning.

Solutions

Edit this solution

Solution: Rounding up

If the sales team is going to sell 30% more computers next month, they will have to sell

\[0.3 \times 48 = 14.4\]

more computers. Of course, you can't sell four-tenths of a computer, so that means they will have to sell 15 more computers. Since \[48 + 15 = 63\], they will need to sell 63 computers next month to receive the bonus.

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Solution: Making a table

If a student sees initially that 12 is 25% of 48, it would be quick to check the percent increase for 12 or more computers.
<table>
<thead>
<tr>
<th>Number of additional computers</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent increase</td>
<td>25%</td>
<td>≈27%</td>
<td>≈29%</td>
<td>≈31%</td>
</tr>
</tbody>
</table>

Thus, they need to sell 15 more computers, or 63 computers, to get the bonus.