Problem Solving: Multiple-Step Problems

A multiple-step problem is a problem where you may need more than one step to find your answer.

Marcie was in a 3-day charity walk. Her friend Gayle said she would give the charity $1.50 for each mile that Marcie walked. The first day, Marcie walked 26.42 miles. The second day, Marcie walked 32.37 miles. The third day, Marcie walked 28.93 miles. How much money did Gayle give?

Step 1. Read through the problem again and write a list of what you already know.

Marcie walked 26.42, 32.37, and 28.93 miles.
Gayle gave $1.50 for each mile.

Step 2. Write a list of what you need to know.

Total amount Gayle gave

Step 3. Write a list of the steps to solve the problem.

Find the total number of miles Marcie walked.
Find the amount Gayle gave.

Step 4. Solve the problem one step at a time.

\[
\begin{align*}
26.42 + 32.37 + 28.93 &= 87.72 & \text{total number of miles Marcie walked} \\
87.72 \times $1.50 &= $131.58 & \text{total amount Gayle gave}
\end{align*}
\]

Use the information above to answer Exercise 1.

1. Marcie’s brother Tom was also in the charity walk. He only walked 0.8 as far as Marcie on the first day, 0.7 as far on the second day, and 0.9 as far on the third day. How many miles did Tom walk, rounded to the nearest hundredth of a mile?

2. Diego is buying fruit at the store. Which costs less: 1 pound of each fruit or 4 pounds of peaches?

<table>
<thead>
<tr>
<th>Fruit</th>
<th>Cost per pound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apples</td>
<td>$0.89</td>
</tr>
<tr>
<td>Oranges</td>
<td>$1.29</td>
</tr>
<tr>
<td>Peaches</td>
<td>$0.99</td>
</tr>
<tr>
<td>Grapes</td>
<td>$1.09</td>
</tr>
</tbody>
</table>