The numbers on two consecutively numbered gym lockers have a sum of 151. What are the locker numbers?

1) Find 2 Consecutive Numbers That Add To 151

2) \( x = 1\text{st} \text{ Number} \)
\( x+1 = \text{Next Consecutive Number} \)

3) \underline{Equation} \quad \text{Sum Is 151}
\[ x + x + 1 = 151 \]
\[ 2x + 1 = 151 \]
\[ 2x = 150 \]
\[ x = 75 \]
\[ x+1 = 76 \]
The larger of two numbers is 10 less than four times the smaller number. The sum of the two numbers is 65. Find the two numbers.

1) Final 2 #s

2) \[
\begin{align*}
    x &= \text{1st \# = Smaller \#} \\
    4x - 10 &= \text{2nd \# = Large \#}
\end{align*}
\]

3) Equation  
   \[
   \begin{align*}
   \text{Sum is } 65 \\
   x + 4x - 10 &= 65 \\
   5x - 10 &= 65 \\
   \frac{5x}{5} - \frac{10}{5} &= \frac{65}{5} \\
   x &= 15 \\
   4(15) - 10 &= 50 \\
   \text{Sum Is } 65!
   \end{align*}
   \]
Worksheet

1) Find Amount The First 2 Children and Charity Receive

2) Charity = \( x = 40,000 \)
   1st Child = \( 2x = 80,000 \)
   2nd Child = \( 3x = 120,000 \)
   3rd Child = \( 60,000 \)
   Sum is \( 300,000 \)

\[ x + 2x + 3x + 60,000 = 3x + 60,000 \]
\[ 6x + 60,000 = 3x + 60,000 \]
\[ 6x = 3x \]
\[ x = \frac{240,000}{6} \]

\[ x = 40,000 \]
2) \[ x = \text{Price of Hot Dog Before Tax} \]
3) \[ \text{Equation} \quad 1.69 + 0.065(1.69) = 1.80 \]

Sales Tax = Price \times Rate

Price of Object + Tax = Total Paid

\[ x + 0.065x = 1.80 \]

\[ 1.065x = 1.80 \]

\[ \frac{1.065x}{1.065} = \frac{1.80}{1.065} \]

\[ x = 1.69 \]
1) Find the number of hours for Plan A to be cheaper than Plan B.

2) \( t = \# \text{ of hours} \)

3) \( \text{Plan } A \leq \text{Plan } B \)
   \[
   15 + 10t \leq 12t
   \]

   \[
   \frac{15}{2} \leq \frac{2t}{2}
   \]

   \[
   7.5 \leq t
   \]

   \( t \geq 7.5 \text{ hr} \)

   \[\text{Rewrite} \]

   \[t \geq 7.5 \text{ hr} \]
1) Find Original Price of Store
2) \[ x = \text{Original Price} \]
3) \[
\begin{align*}
\text{Equation} & \quad \text{Check} \\
600 - 0.30(600) - 50 &= 370 \\
\text{Original Price} - \text{Discounts} &= \text{Sale Price} \\
600 - 0.30x - 50 &= 370 \\
0.70x - 50 &= 320 \\
+50 & \quad +50 \\
0.70x &= 370 \\
\frac{0.70}{0.70} & \quad \frac{370}{0.70} \\
x &= 600
\end{align*}
\]
1) Find Measure of All 3 $\angle$s of $\triangle$

2) 
   - Smallest $\angle = x = 25^\circ$
   - 2nd $\angle = x + 45 = 65^\circ$
   - 3rd $\angle = 15 + 3x = 90^\circ$

3) Equation - Sum of $\angle$s of $\triangle$
   
   $x + x + 65 + 3x + 15 = 180^\circ$
   
   $5x + 80 = 180^\circ$
   
   $5x = 100$
   
   $x = 20$
1) Find Dimensions - Height & Width

2) \[ \begin{align*}
  x &= \text{Width} \quad 3 \\
  x + 3 &= \text{Height} \quad 6
\end{align*} \]

3) \[ \begin{align*}
  \text{Equations} \\
  5 \times \text{height} + 2 \times \text{sides} &= 27 \\
  5x + 2(x+3) &= 27 \text{ ft}.
\end{align*} \]

\[ \begin{align*}
  5x + 2x + 6 &= 27 \\
  7x + 6 &= 27 \\
  -6 &= -6 \\
  7x &= 21 \\
  x &= 3
\end{align*} \]
Worksheet #2.

3) 1) Find Cost of Meals
2) \( x = \) cost of Meals

3) \[
\text{Equation}\]
\[
\frac{2.56}{\text{Meal} + \text{Tip} + \text{Tax}} = \text{Total}
\]
\[
x + 0.10x + 0.08x = 30.21
\]
\[
\frac{1.18x}{1.18} = \frac{30.21}{1.18}
\]
\[
x = 25.60
\]