Quiz 1 Solutions

Problem 1. Suppose that $5x = 15$. What is the value of $x$?

Solution:

By direct calculation, we have

\[
\begin{align*}
5x &= 15 \\
\frac{5x}{5} &= \frac{15}{5} \\
x &= 3.
\end{align*}
\]

So $x = 3$ is our final answer.

Problem 2. Suppose that $2x + 1 = 13$. What is the value of $x$?

Solution:

By direct calculation, we have

\[
\begin{align*}
2x + 1 &= 13 \\
2x + 1 - 1 &= 13 - 1 \\
2x &= 12 \\
\frac{2x}{2} &= \frac{12}{2} \\
x &= 6.
\end{align*}
\]

So $x = 6$ is our final answer.