

## Review Exercise Set 9

Exercise 1: Solve and graph.

$$x - 5 \leq 9$$

Exercise 2: Solve and graph.

$$-9 < y - 7$$

Exercise 3: Solve and graph.

$$5x - 9 \geq 4x - 14$$

Exercise 4: Solve.

$$5.3x < 3.3x - 14.2$$

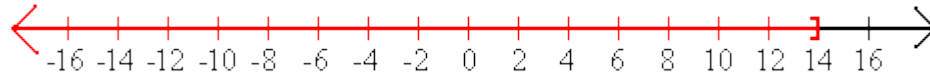
Exercise 5: Solve.

$$3x + \frac{5}{7} \geq x + \frac{1}{2}$$

## Review Exercise Set 9 Answer Key

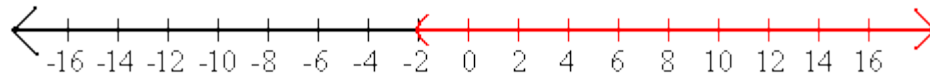
Exercise 1: Solve and graph.

$$\begin{aligned}x - 5 &\leq 9 \\x - 5 + 5 &\leq 9 + 5 \\x &\leq 14\end{aligned}$$



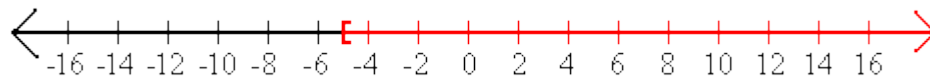
Exercise 2: Solve and graph.

$$\begin{aligned}-9 &< y - 7 \\-9 + 7 &< y - 7 + 7 \\-2 &< y \\y &> -2\end{aligned}$$



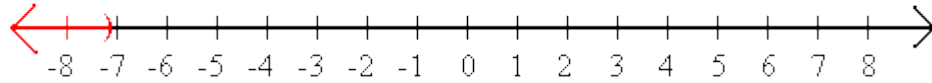
Exercise 3: Solve and graph.

$$\begin{aligned}5x - 9 &\geq 4x - 14 \\5x - 4x - 9 &\geq 4x - 4x - 14 \\x - 9 &\geq -14 \\x - 9 + 9 &\geq -14 + 9 \\x &\geq -5\end{aligned}$$



Exercise 4: Solve.

$$\begin{aligned}5.3x &< 3.3x - 14.2 \\5.3x - 3.3x &< 3.3x - 3.3x - 14.2 \\2x &< -14.2 \\2x \div 2 &< -14.2 \div 2 \\x &< -7.1\end{aligned}$$



Exercise 5: Solve.

$$\begin{aligned}3x + \frac{5}{7} &\geq x + \frac{1}{2} \\3x - x + \frac{5}{7} &\geq x - x + \frac{1}{2} \\2x + \frac{5}{7} &\geq \frac{1}{2} \\2x + \frac{5}{7} - \frac{5}{7} &\geq \frac{1}{2} - \frac{5}{7} \\2x &\geq \frac{7}{14} - \frac{10}{14} \\2x &\geq -\frac{3}{14} \\\frac{1}{2} \times 2x &\geq \frac{1}{2} \times \left(-\frac{3}{14}\right) \\x &\geq -\frac{3}{28}\end{aligned}$$

