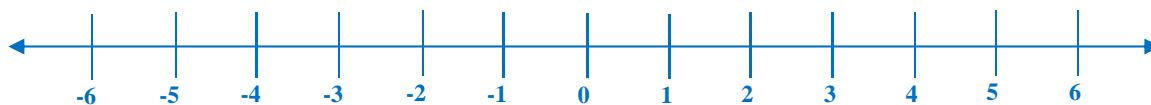


Compound Inequalities Exit Quiz

Graph the solution set of each compound inequality.

1. $x \leq -1$ or $x \geq 4$



2. $3 > x$ and $x \geq -4$



Solve each compound inequality. Then graph the solution set.

3. $x - 2 \leq 5$ or $-x > -4$



4. $10 < 4 - 3x$ or $4 - 3x < -11$



Word Problem

5. The bacteria that can be found on raw or undercooked chicken multiply rapidly at temperature between 40° and 40° . Write an inequality to represent temperature at which the bacteria on raw or undercooked chicken multiply.

Compound Inequalities Exit Quiz

ANSWER

Graph the solution set of each compound inequality.

1. $x \leq -1$ or $x \geq 4$



2. $3 > x$ and $x \geq -4$



Solve each compound inequality. Then graph the solution set.

3. $x - 2 \leq 5$ or $-x > -4$

$$\begin{aligned} x - 2 &\leq 5 \\ x - 2 + 2 &\leq 5 + 2 \end{aligned}$$

$$x \leq 7$$

$$\begin{aligned} -x &> -4 \\ -x &\quad -4 \\ \hline -1 &< -1 \\ x &< 4 \end{aligned}$$

$$x \leq 7$$



4. $10 < 4 - 3x$ or $4 - 3x < -11$

$$\begin{aligned} 10 &< 4 - 3x \\ 10 - 4 &< 4 - 4 - 3x \\ 6 &< -3x \end{aligned}$$

$$\begin{aligned} \frac{6}{-3} &> \frac{-3x}{-3} \\ -2 &> x \end{aligned}$$

$$\begin{aligned} 4 - 3x &< -5 \\ 4 - 4 - 3x &< -5 - 4 \\ -3x &< -9 \\ \frac{-3x}{-3} &> \frac{-9}{-3} \\ x &> 3 \end{aligned}$$

$$x < -2 \text{ or } x > 3$$



Word Problem

5. The bacteria that can be found on raw or undercooked chicken multiply rapidly at temperature between 40° and 140° . Write an inequality to represent temperature at which the bacteria on raw or undercooked chicken multiply.

$$40^\circ \leq x \leq 140^\circ$$