

Name Key
Mrs. Roumbos

Date _____
8R Period _____

Analyzing Solutions Homework

Solve the equation, and interpret the results. Tell whether each equation has one, zero, or infinitely many solutions.

<p>1) $5(x + 2) = 5x + 10$</p> $\begin{array}{r} 5x + 10 = 5x + 10 \\ -5x \quad -5x \\ \hline 10 = 10 \end{array}$ <p style="border: 1px solid black; padding: 5px; display: inline-block;">Infinitely many solutions</p>	<p>2) $-4x + 5 = 6x - 5$</p> $\begin{array}{r} -4x + 5 = 6x - 5 \\ +4x \quad +4x \\ \hline 5 = 10x - 5 \\ +5 \quad +5 \\ \hline 10 = 10x \\ \frac{10}{10} \quad \frac{10x}{10} \\ \hline x = 1 \end{array}$ <p style="border: 1px solid black; padding: 5px; display: inline-block;">One solution</p>
<p>3) $x - 2x - 6 = 2x - 3(x + 2)$</p> $\begin{array}{r} (x - 2x) - 6 = (2x - 3x) - 6 \\ -x - 6 = -x - 6 \\ +x \quad +x \\ \hline -6 = -6 \end{array}$ <p style="border: 1px solid black; padding: 5px; display: inline-block;">Infinitely many solutions</p>	<p>4) $2x - 3 = 2x - 5$</p> $\begin{array}{r} 2x - 3 = 2x - 5 \\ -2x \quad -2x \\ \hline -3 = -5 \end{array}$ <p style="border: 1px solid black; padding: 5px; display: inline-block;">No solutions</p>