

Identity Statements and No Solution Statements

Name _____

Date _____ Period _____

Solve the following equations for x

$$2x - 4 = 2(x - 2)$$

$$3(x + 2) = 3x - 3$$

Solve the following equations for x

$$2x - 5x + 5 = -3(x - 1) + 2$$

$$-(x + 2) = 3x - 4x + 2$$

Solve the following equations for x

$$1.5x + 4.75 = 1.25x + 0.25x$$

Solve the following equations for x

$$\frac{2x}{3} - \frac{x}{5} = \frac{7x}{15}$$

Solve the following equations for x

$$\begin{array}{rcl}
 2x - 4 & = & 2(x - 2) \\
 \cancel{2x} - 4 & = & \cancel{2x} - 4 \\
 -4 & = & -4
 \end{array}$$

True Statement

Identity Statement

Solution: All Real Numbers

$$\begin{array}{rcl}
 3(x + 2) & = & 3x - 3 \\
 \cancel{3x} + 6 & = & \cancel{3x} - 3 \\
 6 & = & -3
 \end{array}$$

Untrue Statement

No Solution Statement

Solution: No Solution