

ELEMENTARY ALGEBRA
 UNIT 6 - LINEAR EQUATIONS
 6.4 - THREE-STEP EQUATIONS

NAME _____
 PERIOD ____
 ASSIGNMENT ____

Solve:

$$*1. \quad \begin{array}{c} 5x - 4 = 5 + 2x \\ \uparrow \qquad \qquad \uparrow \\ -2x \qquad \qquad -2x \end{array}$$

To solve for "x,"
 you must get all
 of the "x's" on
 the same side
 of the "=" sign.
 Subtract "2x"
 from both sides.

$$3x - 4 = 5$$

$$\begin{array}{c} \uparrow \quad \uparrow \\ +4 \quad +4 \end{array}$$

Add "4" to
 both sides.

$$3x = 9$$

Divide both
 sides by "3."

$$\frac{3x}{3} = \frac{9}{3}$$

$x = 3$

$$*2. \quad \begin{array}{c} 1 - 5x = 2x + 8 \\ \uparrow \qquad \qquad \uparrow \\ +5x \quad +5x \end{array}$$

Get the "x's" on
 the same side
 of the "=" sign.
 Add "5x"
 to both sides.

$$\begin{array}{c} 1 \\ \uparrow \\ -8 \end{array} = 7x + 8 \quad \begin{array}{c} \uparrow \\ -8 \end{array}$$

Add "-8" to
 both sides.

$$-7 = 7x$$

Divide both
 sides by "7."

$$\frac{-7}{7} = \frac{7x}{7}$$

$x = -1$

Solve:

3. $2x - 3 = 5 - 2x$

4. $4 + 5x = 4x - 3$

5. $6x - 1 = 6 - x$

6. $3 - 2x = x - 6$

7. $4x + 5 = 2x - 7$

8. $2 - 7x = 2 - x$

9. $3x + 7 = 1 - 2x$

***1.**

3. $x = 2$

4. $x = -7$

5. $x = 1$

6. $x = 3$

***2.**

7. $x = -6$

8. $x = 0$

9. $x = \frac{-6}{5}$