

Some quick notes:

Solving Equations 8

Distributing

Name: _____

Key

1) $5 + 3(x - 4) = 2(x + 1)$

$$5 + 3x + -12 = 2x + 2$$

$$3x + -7 = 2x + 2$$

$$x = 9$$

3) $3x - 10 = 2(4x - 5)$

$$3x + -10 = 8x + -10$$

$$0 = 5x$$

$$x = 0$$

2) $3(x - 1) = 9 + x$

$$3x + -3 = x + 9$$

$$2x = 12$$

$$x = 6$$

4) $8(x + 1) = 4x - 8$

$$8x + 8 = 4x + -8$$

$$4x = -16$$

$$x = -4$$

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

$$5 - x + 3 = -1 + 2x - 6$$

$$-x + 2 = 2x - 7$$

$$9 = 3x$$

$$x = 3$$

$$7) \frac{1}{2}(8 - 6x) = x$$

$$4 - 3x = x$$

$$4 = 4x$$

$$x = 1$$

$$6) 2(x + 4) = 3(x - 2)$$

$$2x + 8 = 3x - 6$$

$$14 = x$$

$$8) 3(x + 1) = 2x + 7$$

$$3x + 3 = 2x + 7$$

$$x = 4$$