

Name: _____

Date: _____

~~Teacher~~
Quiz lesson 11 to 13 ~ Solving Equations

1. $3m - 1 = 5$

$$3m - \cancel{1} + 1 = 5 + 1$$

$$\frac{3m}{3} = \frac{6}{3}$$

$$m = 2$$

2. $5x - 7 = 2x + 3$

$$\cancel{-2x} + 5x - 7 = 2x - \cancel{2x} + 3$$

$$3x - 7 = 3$$

$$3x - \cancel{7} + 7 = 3 + 7$$

$$3x = \frac{10}{3}$$

$$x = 3.33$$

3. $(a + 1) - 4(a - 4) = 5$

$$a + 1 - 4a + 16 = 5$$

$$-3a + 17 = 5$$

$$-3a + \cancel{17} - 17 = 5 - 17$$

$$\frac{-3a}{-3} = \frac{-12}{-3}$$

$$a = 4$$

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

$$8x - 2 = 9x - 3 + 4$$

$$8x - 2 = 9x + 1$$

$$8x - 2 - 9x = \cancel{9x} - \cancel{9x} + 1$$

$$-x - 2 = 1$$

$$-x - \cancel{2} + 2 = 1 + 2$$

$$-x = 3$$

$$x = -3$$

5.

$$\frac{3x - 1}{4} = \frac{4 - 3x}{2}$$

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

$$6x - 2 = 16 - 12x$$

$$12x + 6x - 2 = 16 - 12x + 12x$$

$$18x - 2 = 16$$

$$18x - \cancel{2} + 2 = 16 + 2$$

$$\frac{18x}{18} = \frac{18}{18}$$

$$x = 1$$

$$.75x - .25 = 2 - 1.5x$$

$$.75x + 1.5x = 2 + .25$$

$$2.25x = 2.25 \div 2.25$$

$$x = 1$$