After completing the worksheet, check your solutions against the solutions given on my website

Algebra Worksheet 2

<u>Determine whether the following values are correct</u> for the unknowns in each question. Substitute the given value in for the variable and see if both sides are equal.

a)
$$a = 3$$

 $2a + 3 = 7$

e)
$$e = -3$$

 $2e + 5 = -2e - 7$
i) $i = \frac{3}{5}$
 $5i - 4 = -1$

$$i = \frac{3}{5} \\ 5i - 4 = -1$$

b)
$$b = -1$$

 $6 - 2b = 7$

f)
$$f = 4$$

 $f + 5 = 3f - 2$

j)
$$j = -\frac{2}{3}$$

 $2j + 3 = 5j - 2$

c)
$$c = -2$$

 $3c - 5 = -12$

g)
$$g = \frac{1}{2}$$

 $2g + 3 = 5g - 1$

k)
$$k = \frac{3}{2}$$

 $4k + 1 = 2k + 4$

d)
$$d = 2$$

 $4 - 2d = 0$

h)
$$h = -\frac{1}{3}$$

 $3h + 1 = 3 + 9h$

l)
$$l = \frac{9}{2}$$

 $l + 5 = 3l - 4$

Solve each equation for the unknown, then perform a <u>check of your answer</u>. Are both sides equal when you put your value into the equation???

1)
$$3x + 7 = x - 1$$

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

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

5)
$$3 - 3x = 4 - 5x$$

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

6)
$$2x + 6 = -5x + 6$$