

QUIZ #1 @ 20 points
Section 3.1

1. Decide whether the given pair is a solution of the given equation.

$$2x + y = 5; \quad (3, -1)$$

$$x = 3, y = -1$$

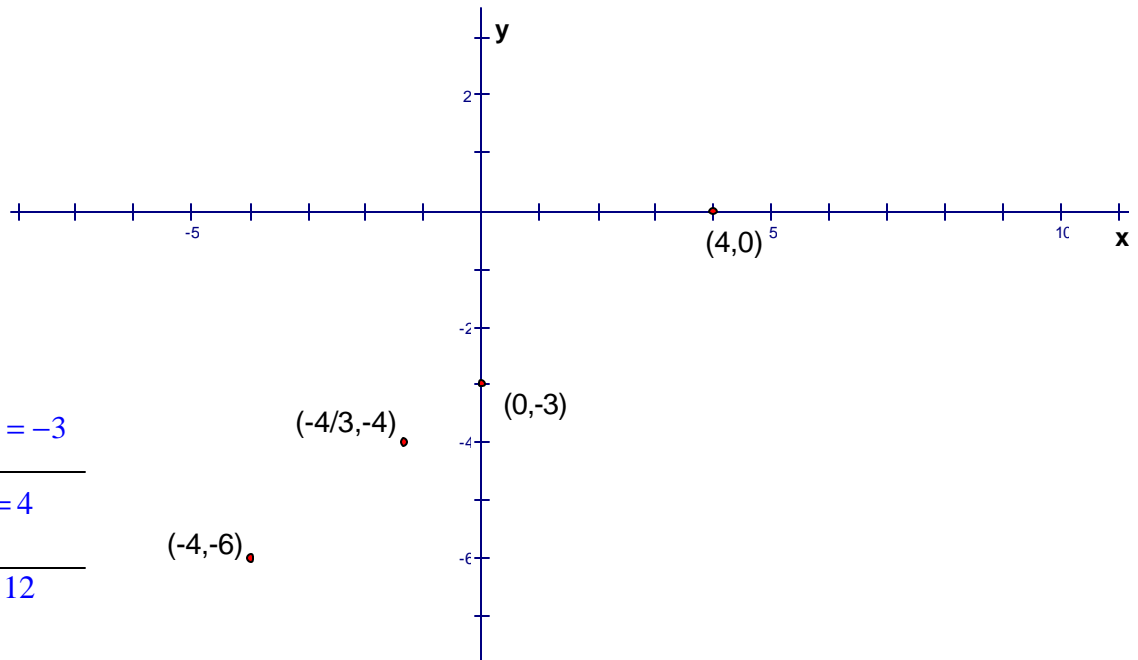
$$2(3) + (-1) = 5$$

$6 - 1 = 5$ true, therefore $(3, -1)$ is a solution of the given equation.

2. Complete each table of values and then plot the ordered pairs. Label the axes and the points. Show all work.

$$3x - 4y = 12$$

x	y
0	-3
4	0
-4	-6
$-\frac{4}{3}$	-4



If $x = 0 \Rightarrow -4y = 12$, so $y = -3$

If $y = 0 \Rightarrow 3x = 12$, so $x = 4$

If $x = -4 \Rightarrow 3(-4) - 4y = 12$
 $-12 - 4y = 12$

$$-12 - 12 = 4y$$

$$-24 = 4y, \text{ so } y = -6$$

If $y = -4 \Rightarrow 3x - 4(-4) = 12$

$$3x + 16 = 12$$

$$3x = 12 - 16$$

$$3x = -4, \text{ so } x = -\frac{4}{3}$$

3. It costs a flat fee of \$20 plus \$5 per day to rent a pressure washer. Therefore, the cost to rent the pressure washer for x days is given by $y = 5x + 20$, where y is in dollars.

Express as an ordered pair each of the following.

a) When the washer is rented for 5 days, the cost is \$45. $(5, 45)$

b) I paid \$50 when I returned the washer, so I must have rented it for 6 days. $(6, 50)$