

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**HW Section 10.3 Graphing Linear Equations**

1. Graph each of the following equations by making a table of values.

a)  $y = 3x$

$x$	0	1	2	3	4
$y$					

b)  $y = 3x + 1$

$x$	0	1	2	3	4
$y$					

c)  $y = 3x + 2$

$x$	0	1	2	3	4
$y$					

2. Given the following equation, evaluate the value of "y" when given the value of "x". Show all your work with the space given:

a)  $y = \frac{2}{3}x$

i)  $x = 6$

ii)  $x = 12$

i)  $x = 24$

b)  $y = 3x + 5$

i)  $x = 4$

ii)  $x = 8$

i)  $x = 24$

c)  $y = \frac{x-1}{2}$

i)  $x = 2$

ii)  $x = 7$

i)  $x = 18$

d)  $y = \frac{2x}{3} + 4$

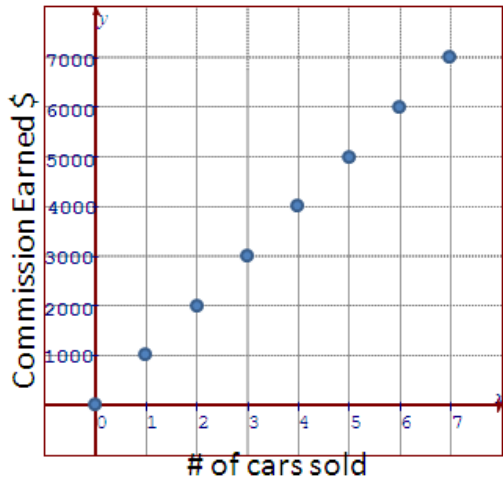
i)  $x = 0$

ii)  $x = 3$

i)  $x = 9$

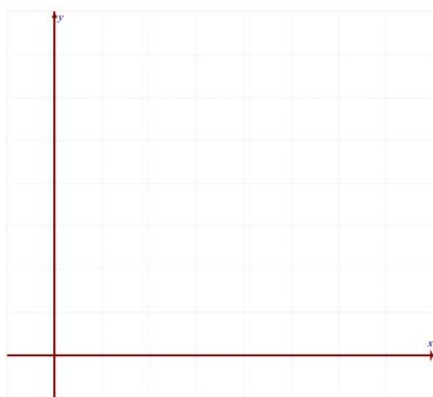
3. Given the following equation, indicate which points will not be on the line  $y = 3x - 4$ . Show all your work and steps:  $A(-2, -10)$ ,  $B(0, -4)$ ,  $C\left(\frac{2}{3}, -2\right)$ ,  $D(5, -11)$ ,  $E(20, 54)$

4. The following graph shows how much Zack earns from commission for the number of cars he sells in a month. Use the graph below to answer the following questions:



- a) How much does Zack earn if he sold 4 cars?
- b) If he earned \$7000 in commission, how many cars did he sell?
- c) How much commission will he earn if he did not sell any cars?
- d) Give an equation that relates the number of cars ( $N$ ) sold with the commission earned ( $C$ )
- e) Should we connect the dots in the graph? Explain why or why not

5. Neil is jogging around his neighbourhood at a constant speed and his distance away from home is given by the formula:  $D = \frac{4}{3}t + 20$ . "D" is the distance in meters and "t" is the time in seconds. Make a table of values and then graph it.



$t$	$D$
20	
40	
60	
80	
100	