Warm Up: Are the following equations in standard form? If not, make the corrections so it is in standard form.

a) 
$$3y - 2x + 4 = 0$$

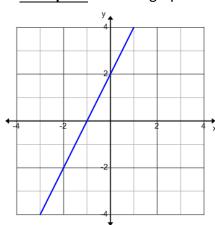
b) 
$$0 = x - 7$$

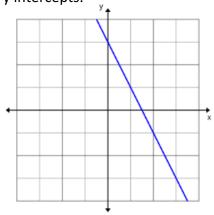
c) 
$$\frac{2}{3}x + \frac{1}{4}y = 7$$

## U6D3 **Graphing a Line Using Intercepts (6.3)**

## What are intercepts?

**Example 1**: Use the graphs below to determine the x & y intercepts.



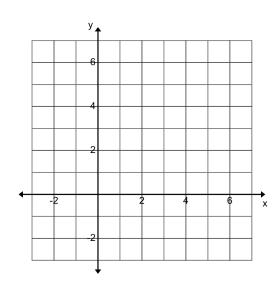


## In General:

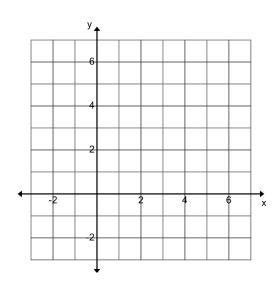
- the x-intercept is the value of x where the line crosses the \_\_\_\_\_ (i.e. )
- the y-intercept is the value of y where the line crosses the \_\_\_\_\_ (i.e. )

**Example 2**: For each line determine the intercepts and then graph the line.

a. 
$$2x - 4y = 8$$



b. 3x + 2y - 12 = 0

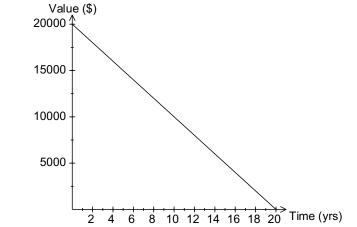


**Example 3**: The graph below illustrates the value of a car from the time it was bought.

a. Identify the V intercept and explain its meaning.

b. Identify the T intercept and explain its meaning.

meaning.



c. What is the slope and it's meaning?

## Example 4:

Determine the slope of each line given the intercepts. Then, write the equation of the line.

- a) x intercept is 3 and y intercept is 12.
- b) x intercept is 5 and y intercept is -2

c) there is no x intercept and the y intercept is 6.

d) x intercept is -4 and there is no y intercept.

U6D3 HW: page 319-321 #1,3acdef,4abc,5cd,6,9,11

QUIZ: NEXT DAY