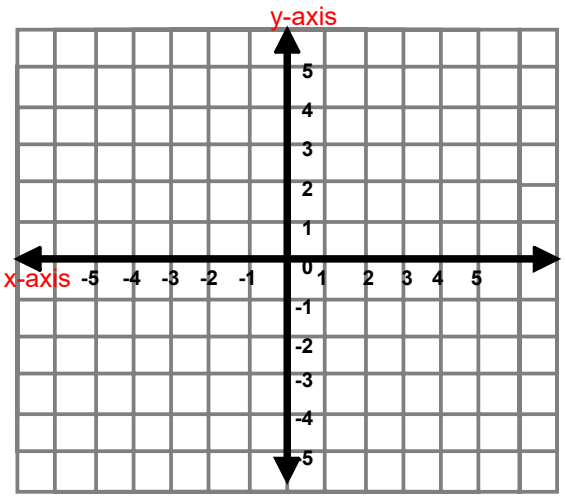
Chapters 4 & 6 Review (Pt 1)

Graphing Using a Chart

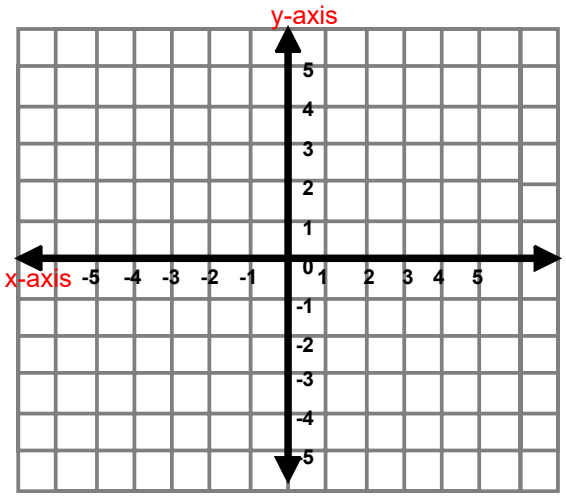
1) Graph the linear equation using an INPUT-OUTPUT TABLE.

$y = 2x - 3$



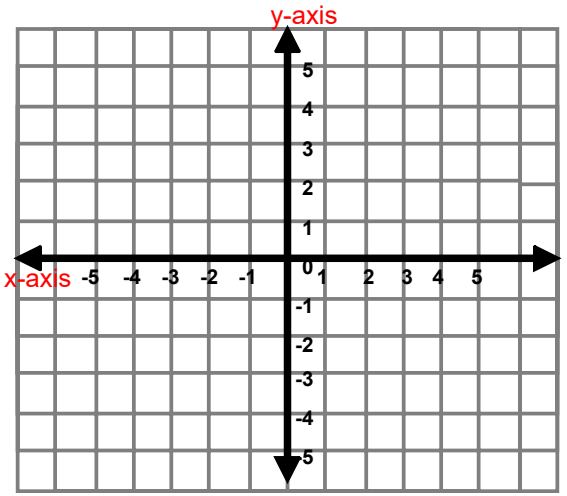
2) Graph the linear equation using an INPUT-OUTPUT TABLE.

$y = -x + 4$



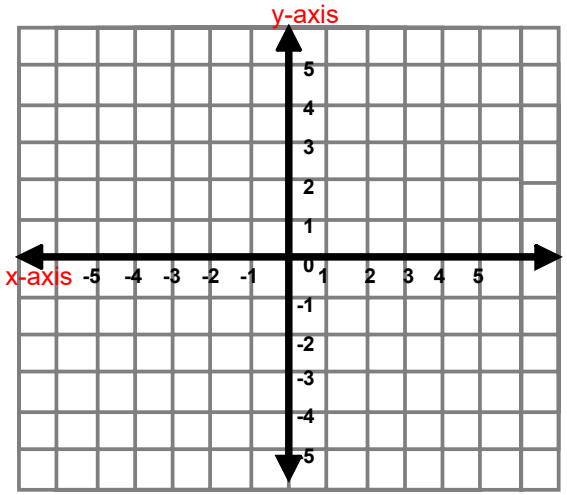
3) Graph the linear equation using an INPUT-OUTPUT TABLE.

$-3x + y = -1$



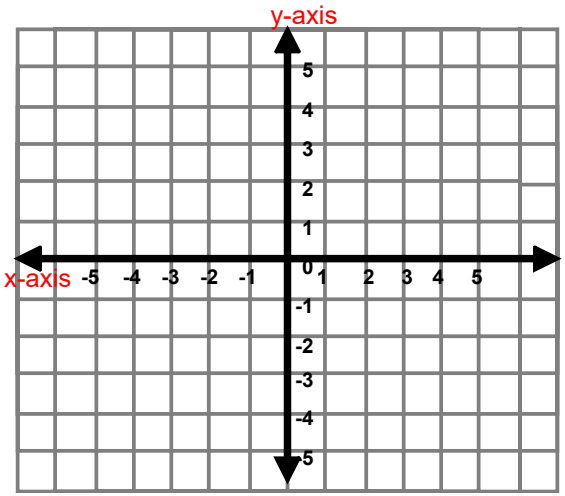
Using a T-Chart

4) Graph $y = \frac{1}{2}x + 1$ using T-chart.



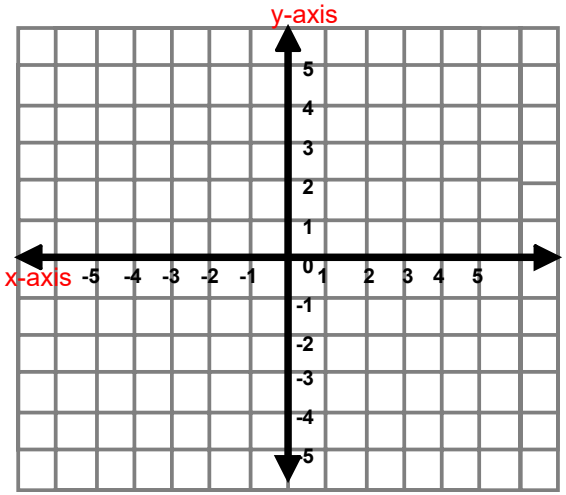
Graphing Horizontal and Vertical Lines

5) $y = 4$

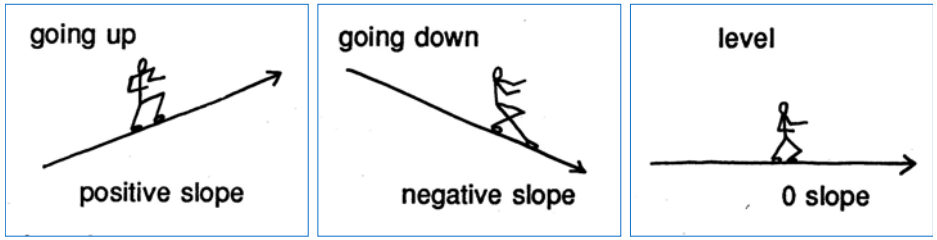


Graphing Horizontal and Vertical Lines

6) $x = 3$



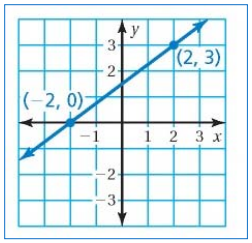
SLOPE OF A LINE



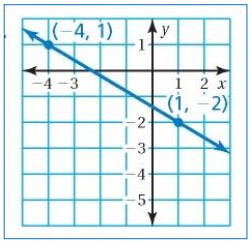
Find the slope of each line.

$slope = \frac{rise}{run}$

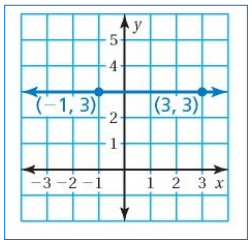
7)



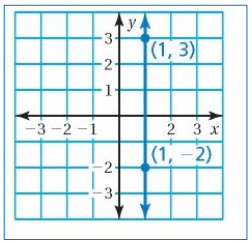
8)



9)



10)



SLOPE FORMULA

$m = \frac{y_2 - y_1}{x_2 - x_1}$

Find the slope between the two points:

11) $(0,7)$ ***and*** $(-4,-1)$

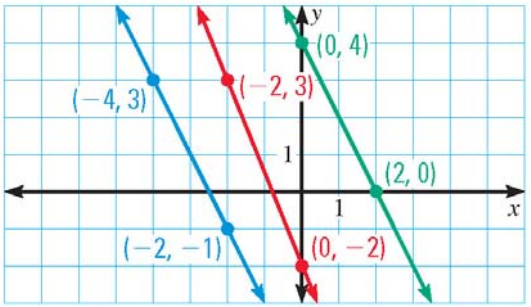
12) $(-2,5)$ ***and*** $(9,5)$

Practice

$m = \frac{y_2 - y_1}{x_2 - x_1}$

Determine which lines are parallel.

13)

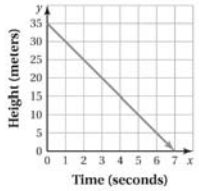


Identify if the following is a proportional relationship.

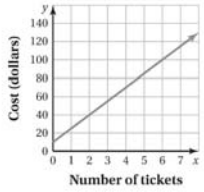
14)

a. Money

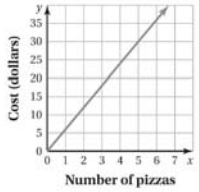
b. Helicopter



c. Tickets



d. Pizzas



On Your Own

Work with a partner. Tell whether x and y are in a proportional relationship. Explain your reasoning.

e.

Laps, x	1	2	3	4
Time (seconds), y	90	200	325	480

f.

Cups of Sugar, x	$\frac{1}{2}$	1	$1\frac{1}{2}$	2
Cups of Flour, y	1	2	3	4

15) CARS After it is purchased, the value of a new car decreases $4000 each year. After 3 years, the car is worth $18,000.

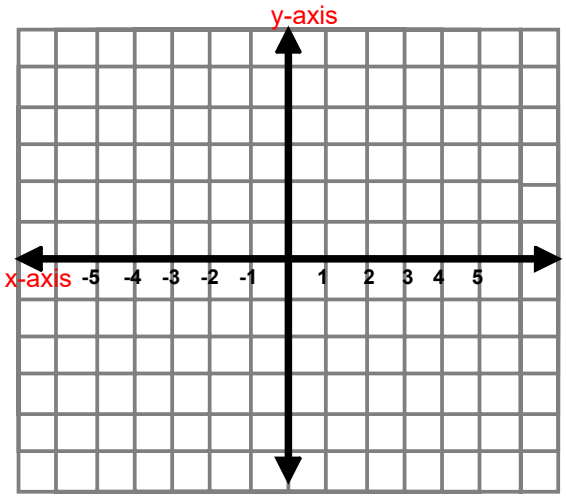
a. Write an equation that represents the value V (in dollars) of the car x years after it is purchased.

b. What was the original value of the car?

Graphing Linear Equations

Graph the following equation using slope-intercept form.

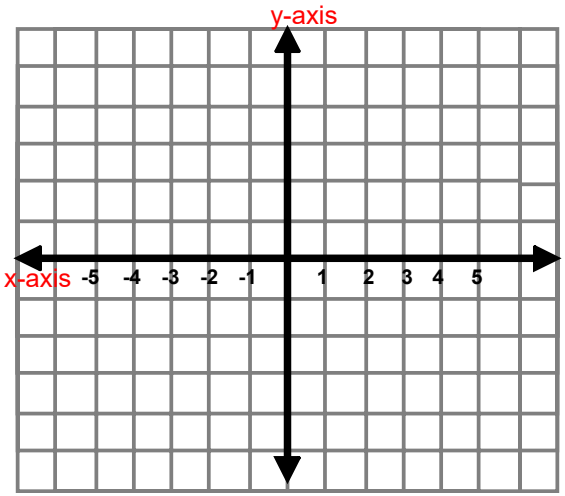
16) $y = 2x - 3$



Graphing Linear Equations

Graph the following equation using slope-intercept form.

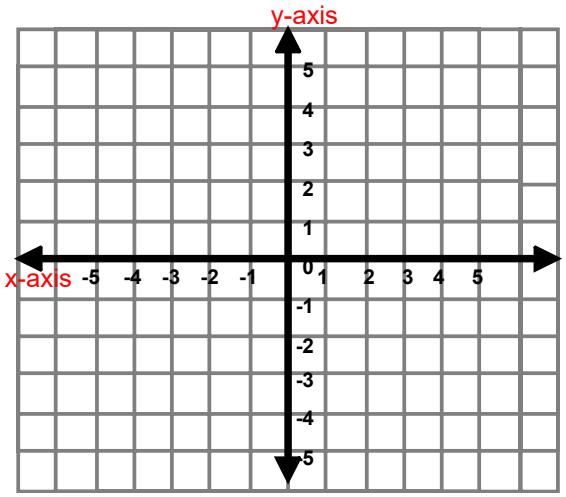
17) $y = -3x + 1$



Graphing Linear Equations

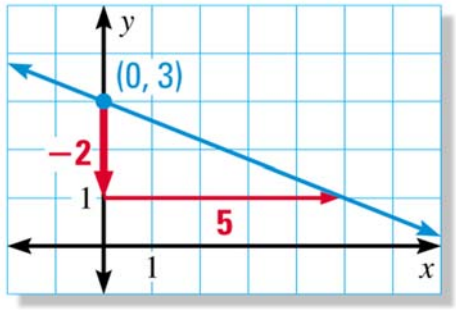
Graph the following equation using slope-intercept form.

18) $y - 2 = \frac{3}{2}x$



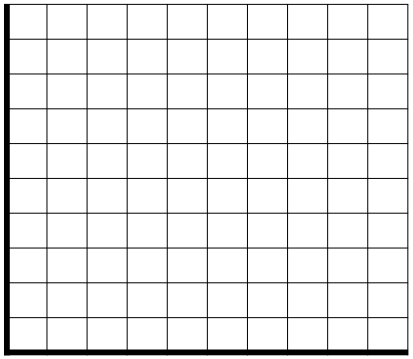
Example

20) Write an equation of the line shown in slope-intercept form.



APPLICATION

21) The cost y (in dollars) of taking a taxi x miles is $y = 2.5x + 2$.
(a) Graph the equation. (b) Interpret the y-intercept and the slope.

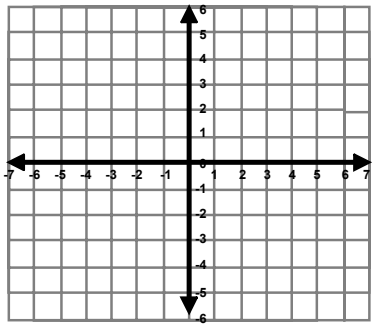


Practice

22) $6x - 4y = 12$

***x*-intercept**
Plug-in ***y*=0** into the equation and solve for ***x***.

***y*-intercept**
Plug-in ***x*=0** into the equation and solve for ***y***.



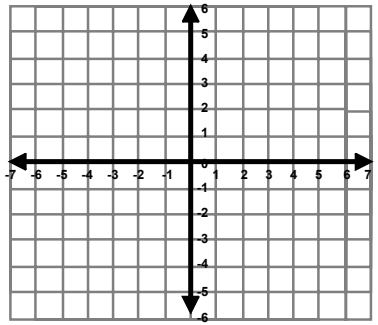
Graph the equation using the intercepts.

Practice

23) $8x + 4y = 24$

***x*-intercept**

Plug-in ***y*=0** into the equation and solve for ***x***.



***y*-intercept**

Plug-in ***x*=0** into the equation and solve for ***y***.

Graph the equation using the intercepts.