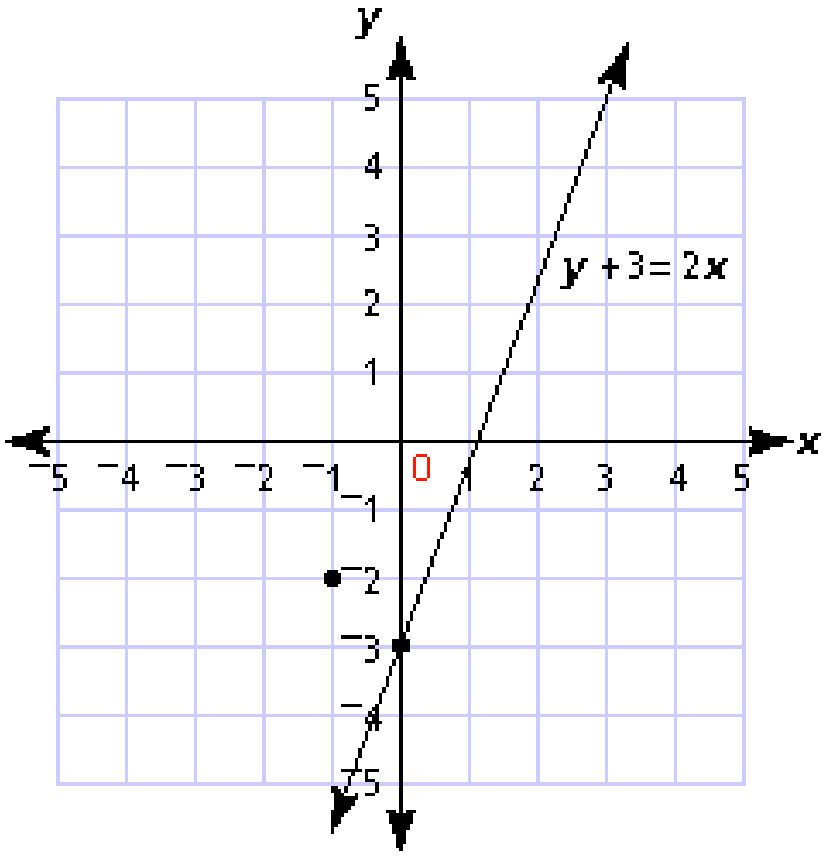
Chapter 1

LINEAR EQUATIONS



REVIEW: Graphing Ordered Pairs

A) Write the point that is located at each ordered pair.

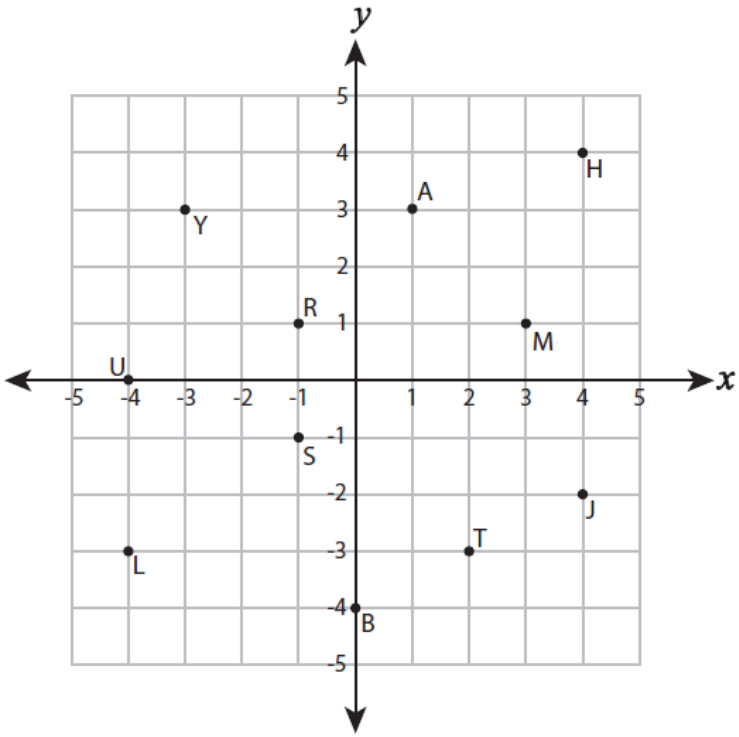
1) (1, 3) _____ 2) (-4, 0) _____

3) (-1, 1) _____ 4) (4, -2) _____

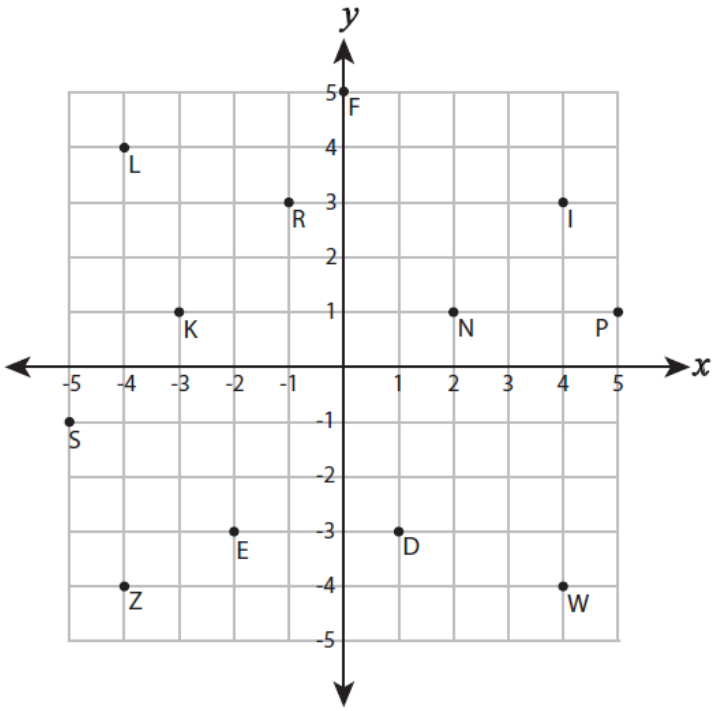
5) (2, -3) _____ 6) (3, 1) _____

7) (4, 4) _____ 8) (0, -4) _____

9) (-3, 3) _____ 10) (-4, -3) _____



B) Write the ordered pair for each point.



11) L (___ , ___) 12) S (___ , ___)

13) E (___ , ___) 14) K (___ , ___)

15) N (___ , ___) 16) F (___ , ___)

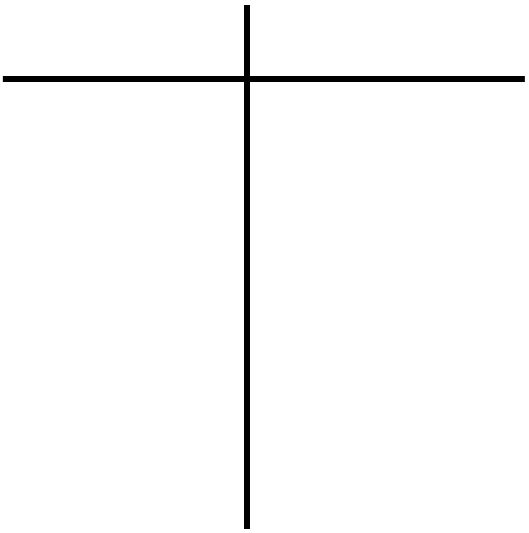
17) I (___ , ___) 18) P (___ , ___)

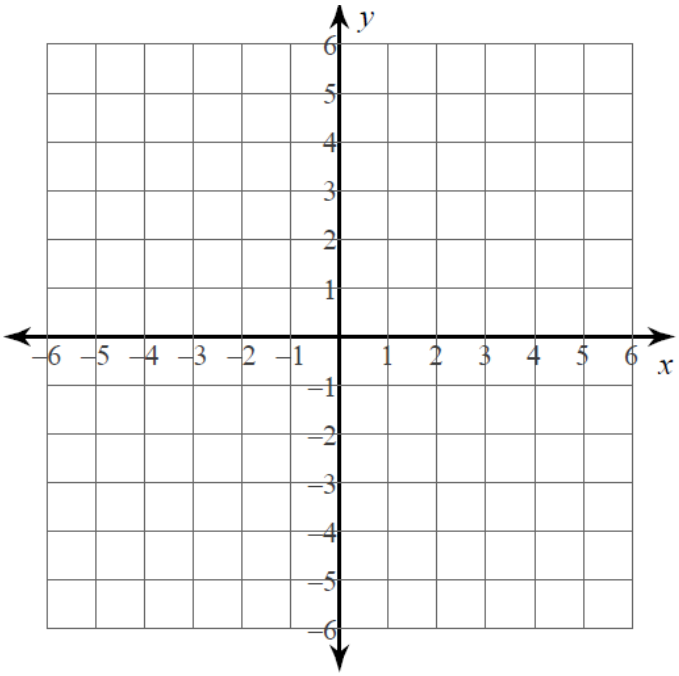
19) D (___ , ___) 20) Z (___ , ___)

Graphing Equations

Example:

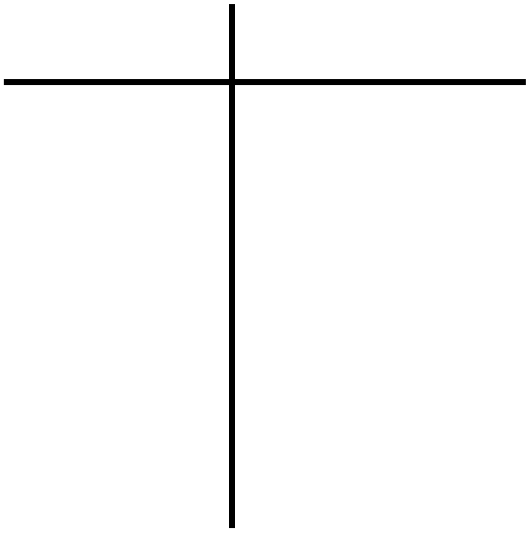
$$y = x + 1$$

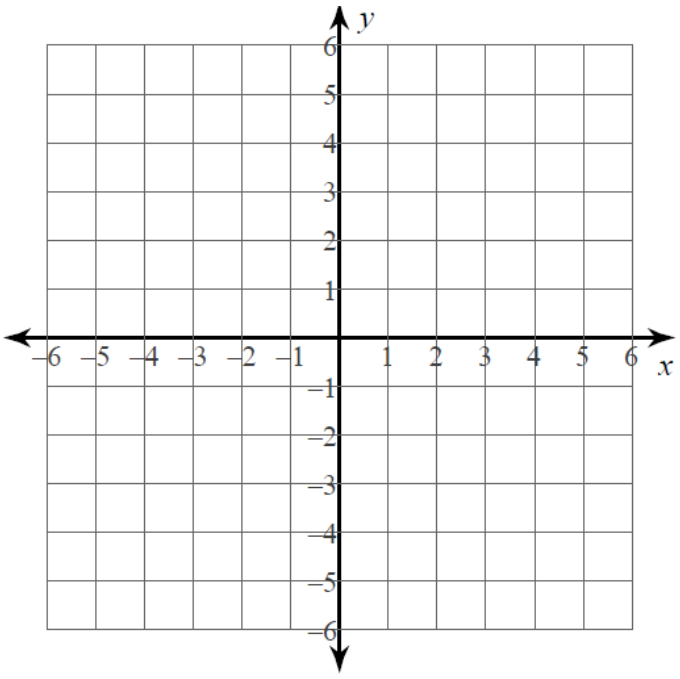




Example:

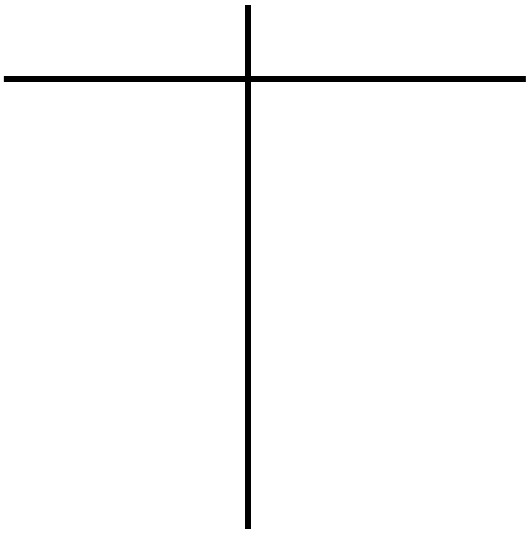
$$y = -x + 2$$

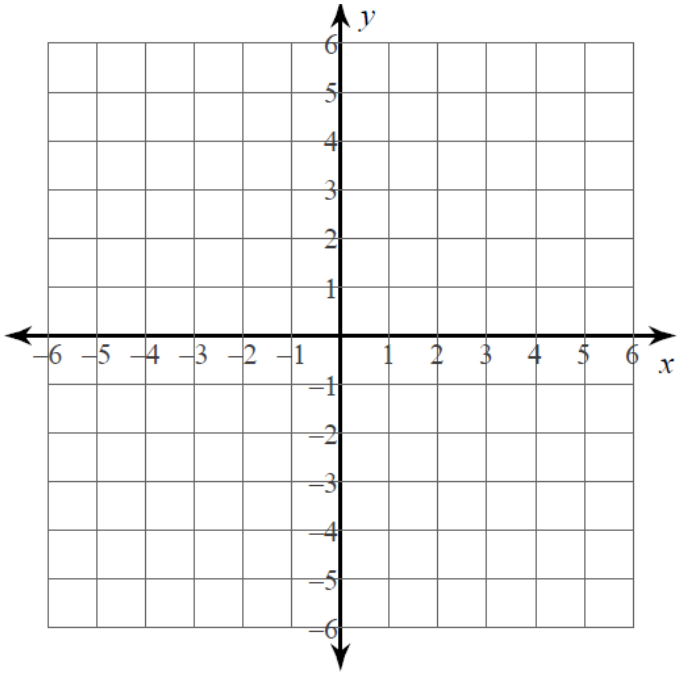




Graphing Equations (Fractions)

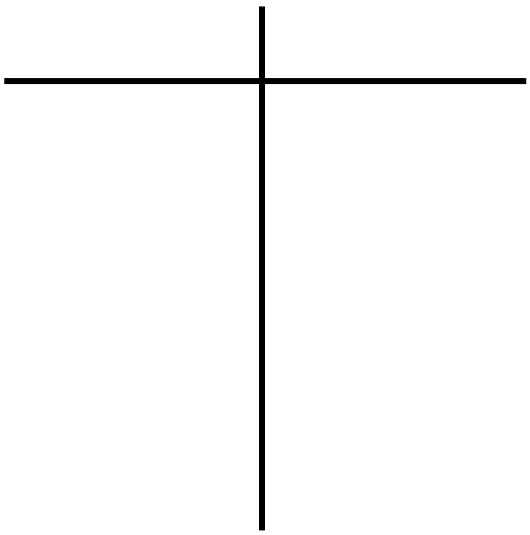
Example: $y = \frac{1}{4}x - 1$

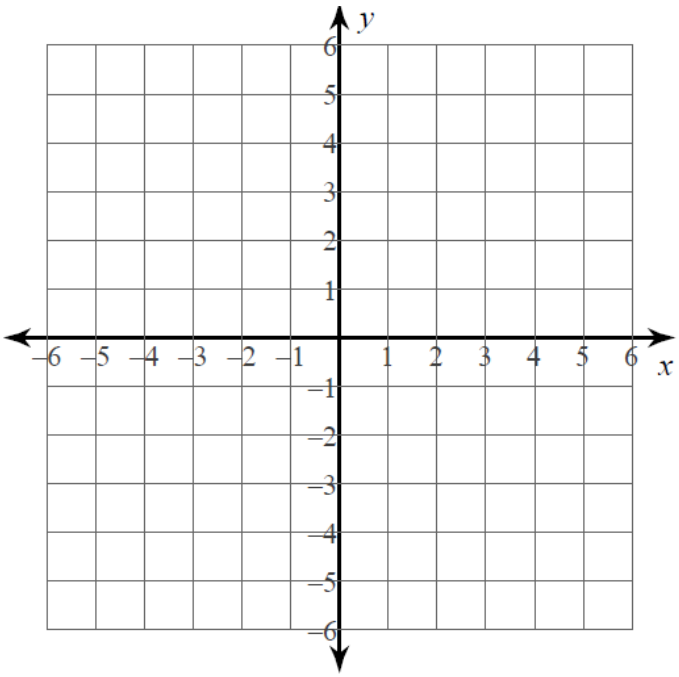




$y = \frac{4}{3}x - 4$

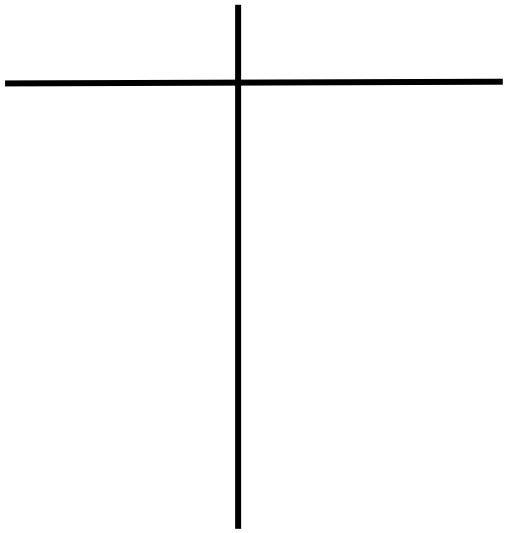
Example:

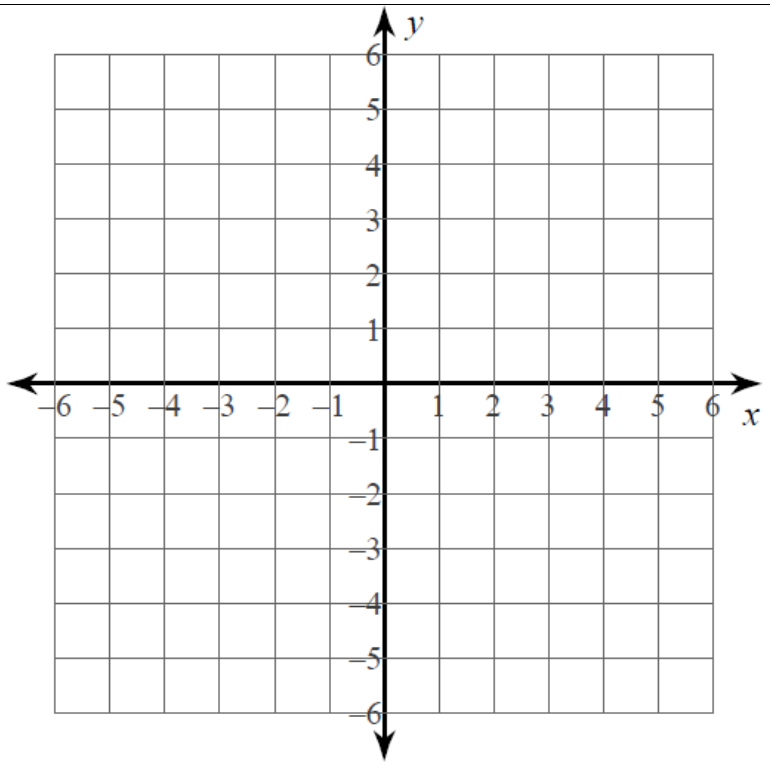




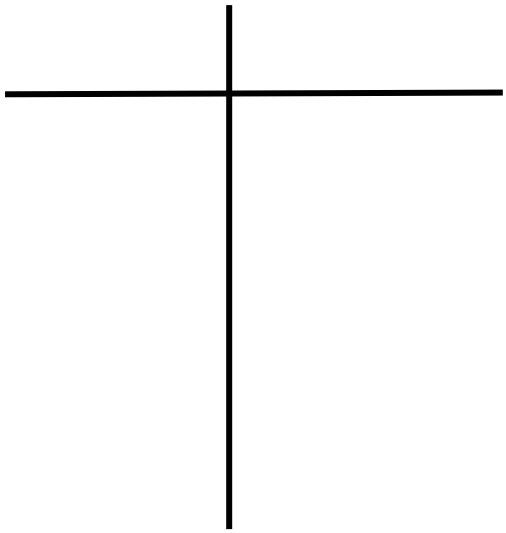
Graphing Equations Practice

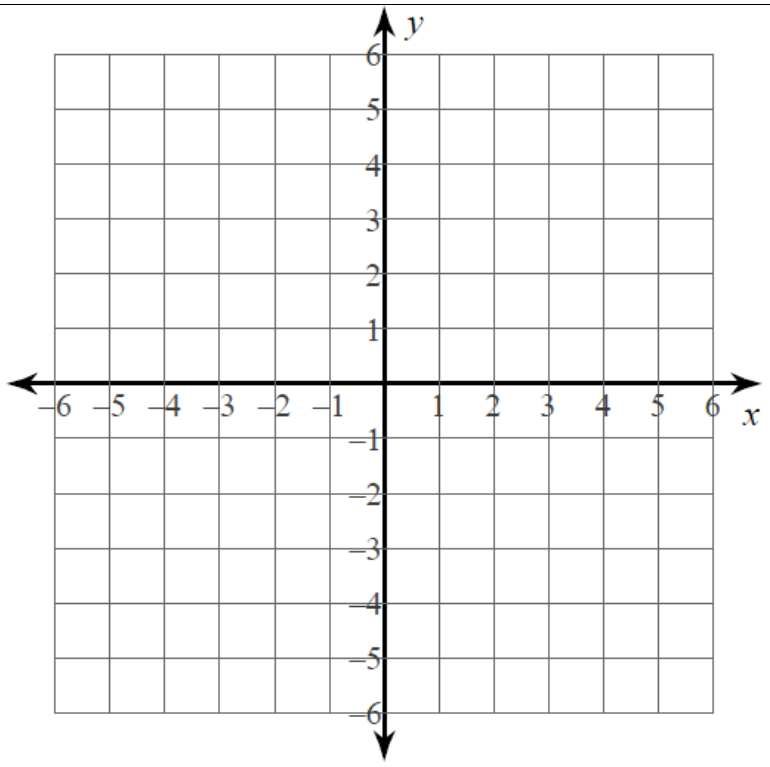
$y = -3x - 3$





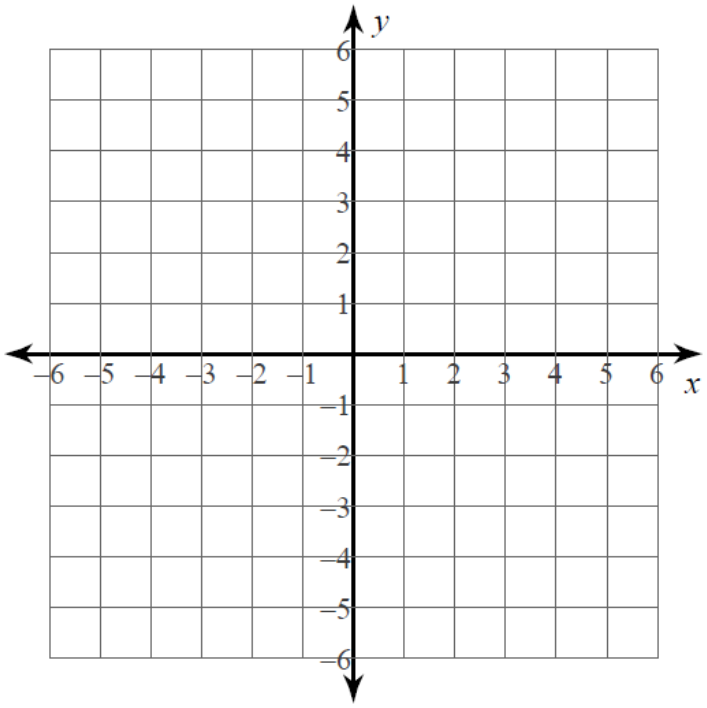
$y = \frac{3}{5}x - 1$



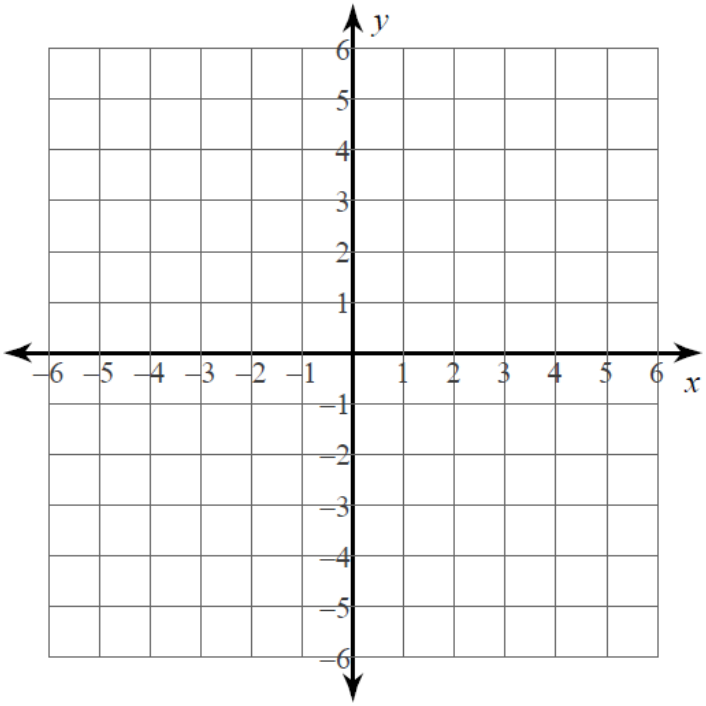


Graphing y= and x=

$x = 5$

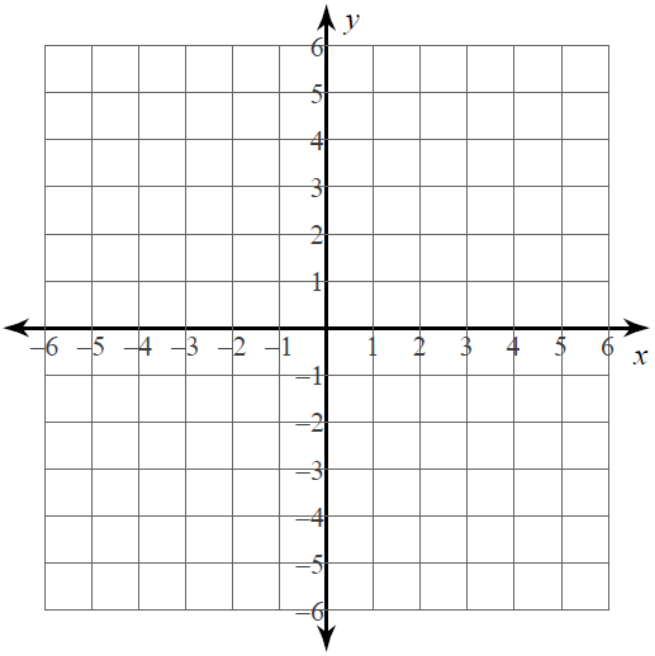


$y = 3$

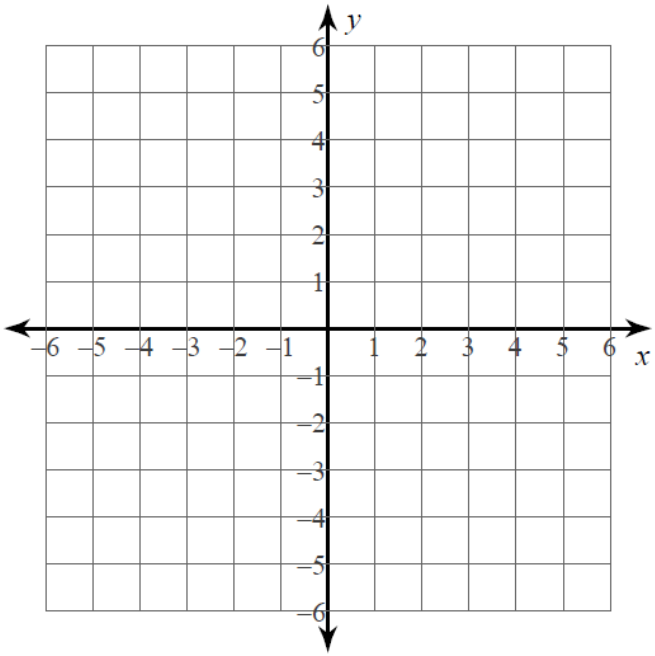


Graphing x= and y= Practice

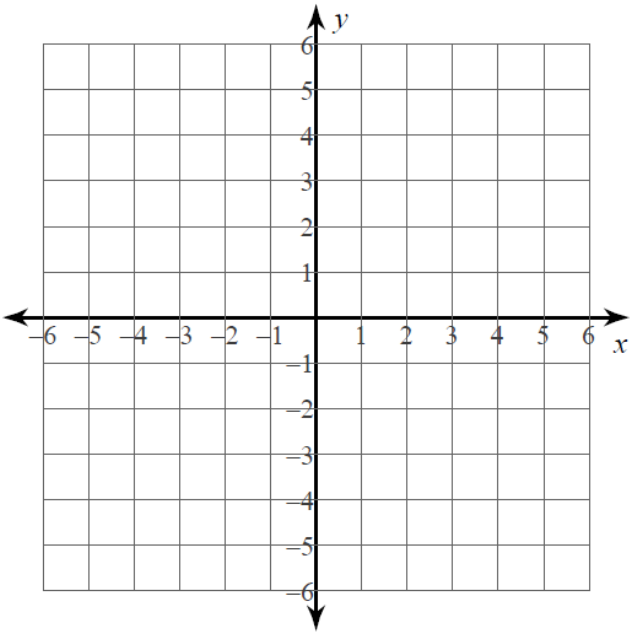
Y= -2



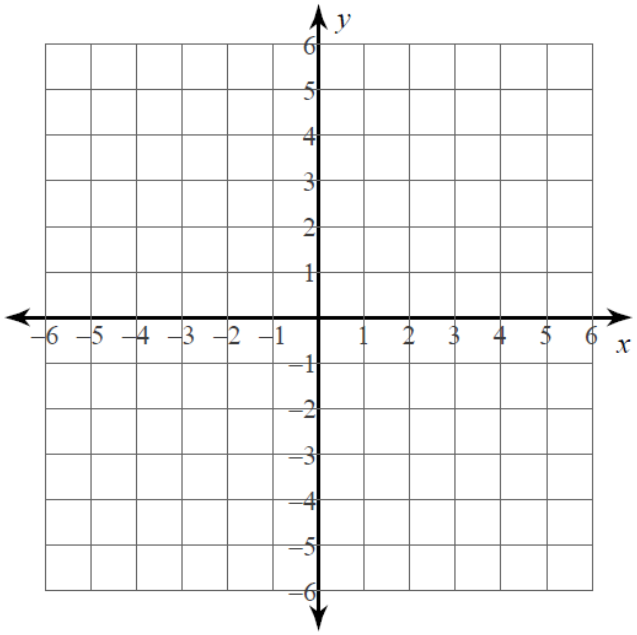
X=-4



Y= 3



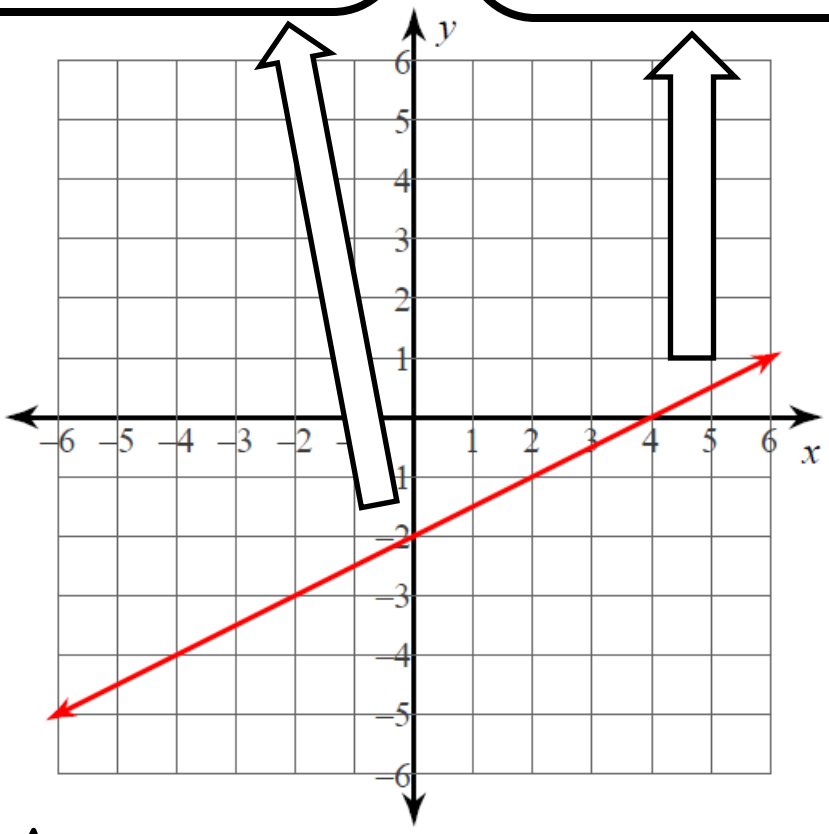
X=5



X and Y Intercepts (ZEROS)

X Intercept Definition:

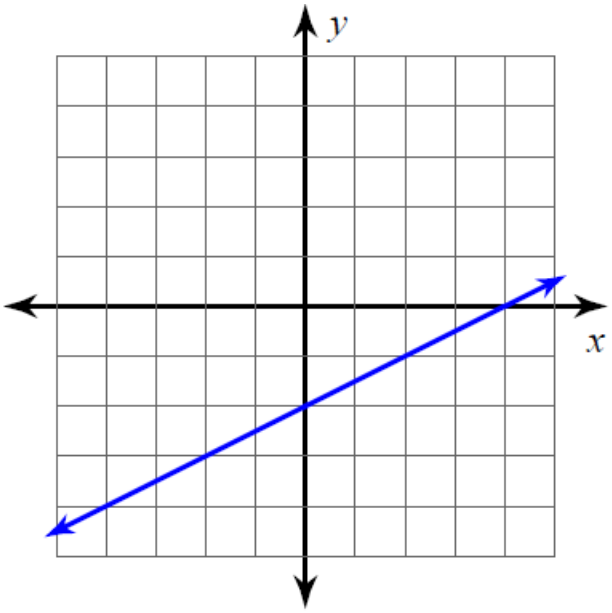
Y Intercept Definition:



Y Intercept

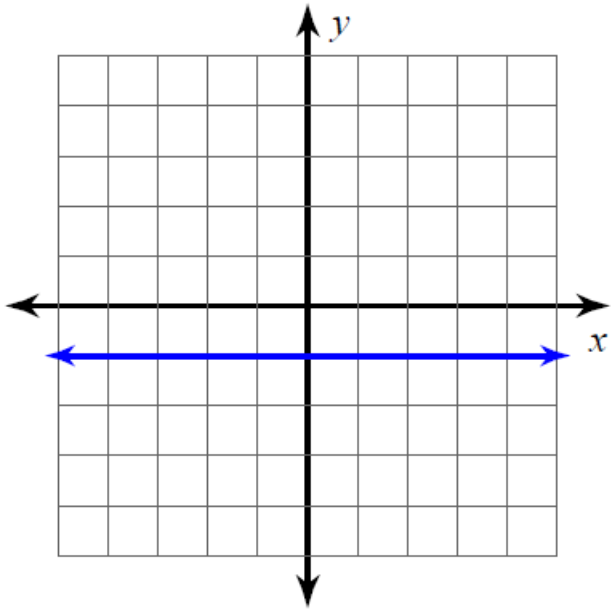
X Intercept

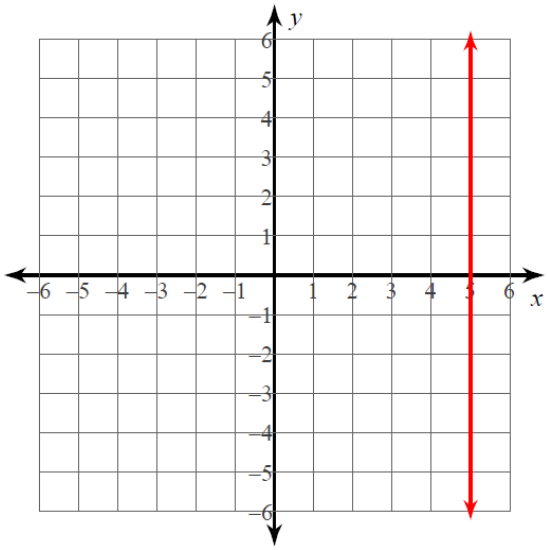
X and Y Intercept Practice



X Intercept:

Y Intercept:





Vertical Line: Only _____ Intercept

Horizontal Line: Only _____ Intercept

X and Y Intercepts: From an Equation

$$y = -6x + 3$$

X Intercept

Y Intercept

$y = 2x + 5$

X Intercept

Y Intercept

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

X Intercept

Y Intercept

$2x + y = -2$

X Intercept

Y Intercept

$3x - 6y = -3$

X Intercept

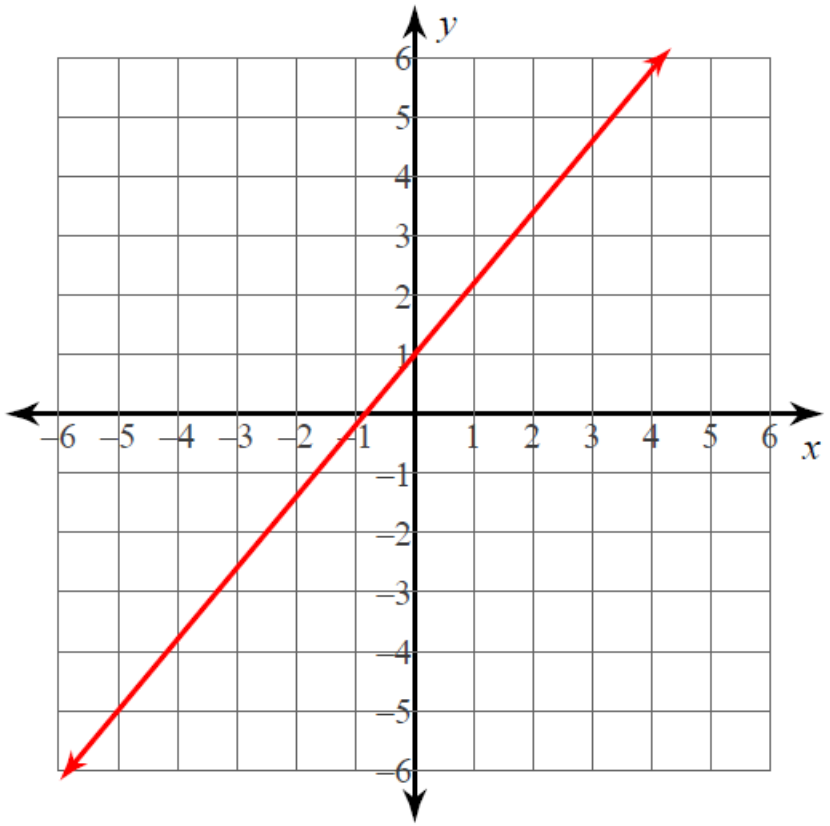
Y Intercept

$x - y = -1$

X Intercept

Y Intercept

X and Y Intercept Practice



X Intercept:

Y Intercept:

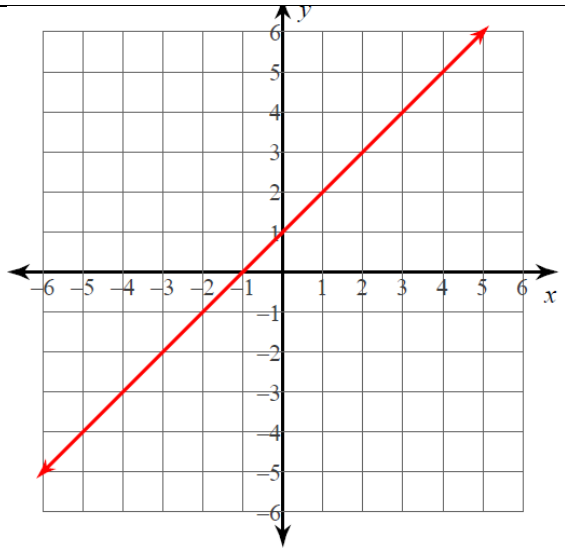
$$y = \frac{1}{4}x + 2$$

X Intercept:

Y Intercept:

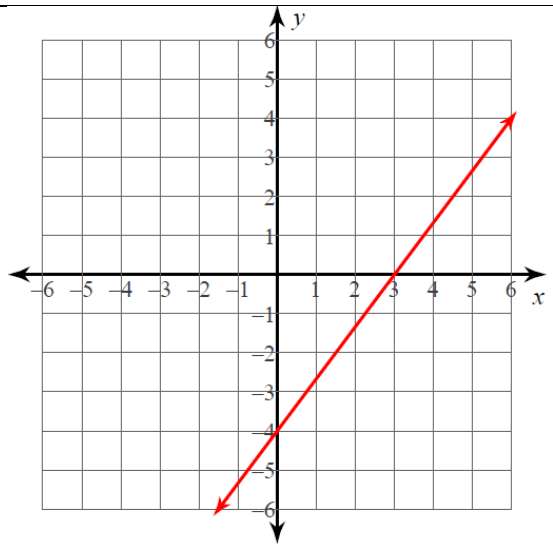
Review (x and y intercepts)

Determine the x and y Intercepts



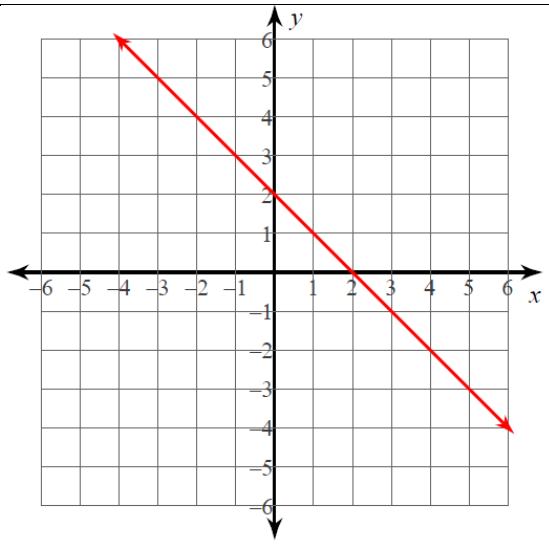
X Intercept:

Y Intercept:



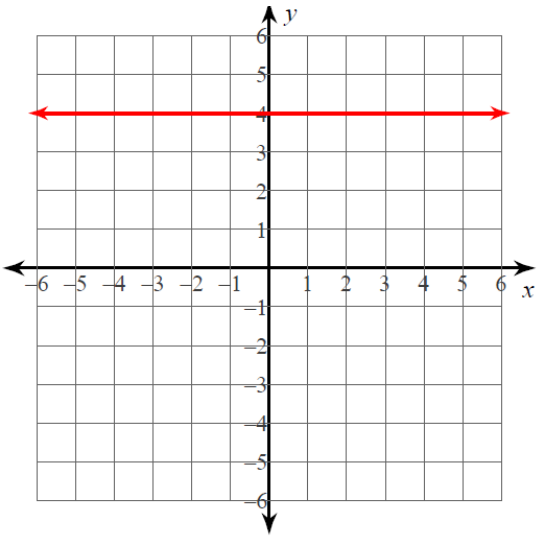
X Intercept:

Y Intercept:



X Intercept:

Y Intercept:



X Intercept:

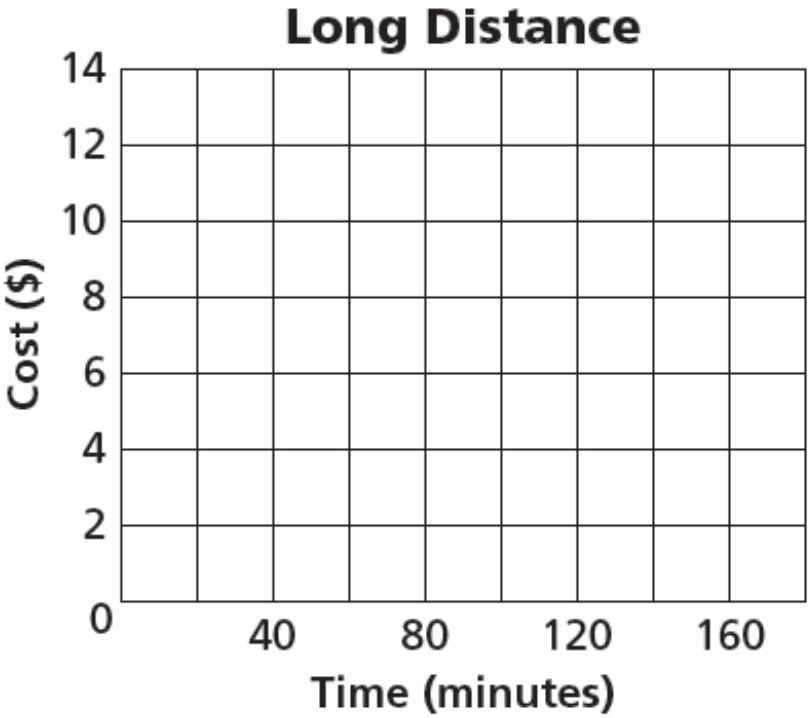
Y Intercept:

Word Problems

COMMUNICATIONS A telephone company charges $4.95 per month for long distance calls plus $0.05 per minute. The monthly cost c of long distance calls can be described by the equation $c = 0.05m + 4.95$, where m is the number of minutes.

a. Find the y-intercept of the graph of the equation.

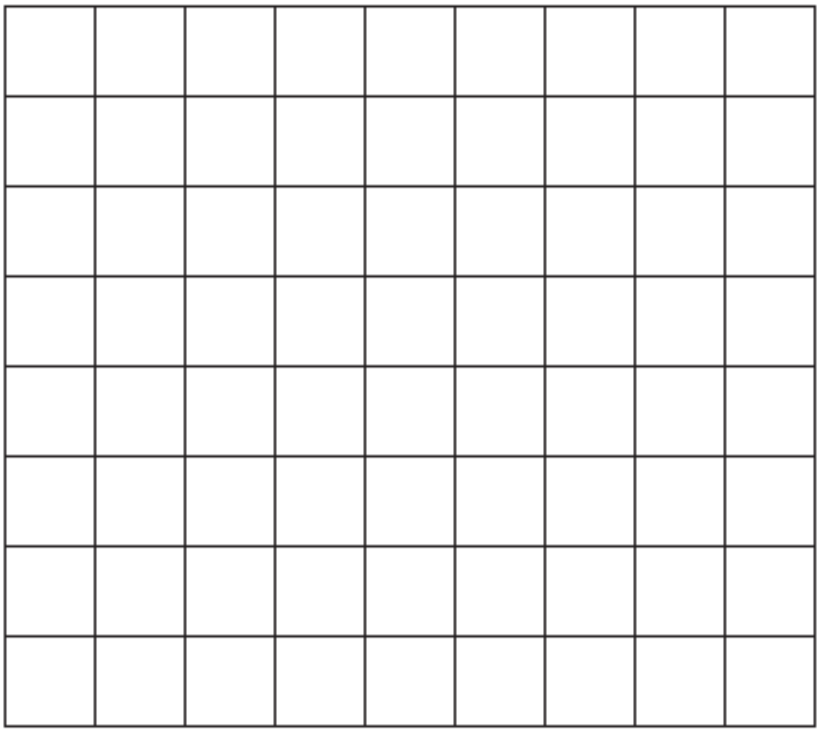
b. Graph the equation.



c. If you talk 140 minutes, what is the monthly cost?

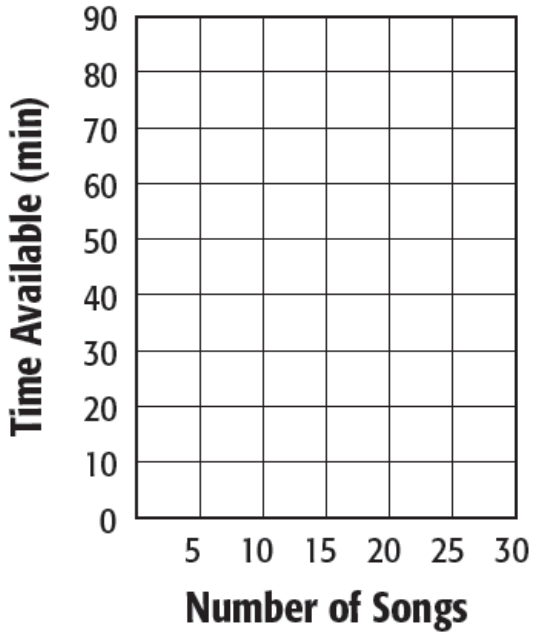
MARINE BIOLOGY Killer whales usually swim at a rate of 3.2–9.7 kilometers per hour, though they can travel up to 48.4 kilometers per hour. Suppose a migrating killer whale is swimming at an average rate of 4.5 kilometers per hour. The distance d the whale has traveled in t hours can be predicted by the equation $d = 4.5t$.

a. Graph the equation.

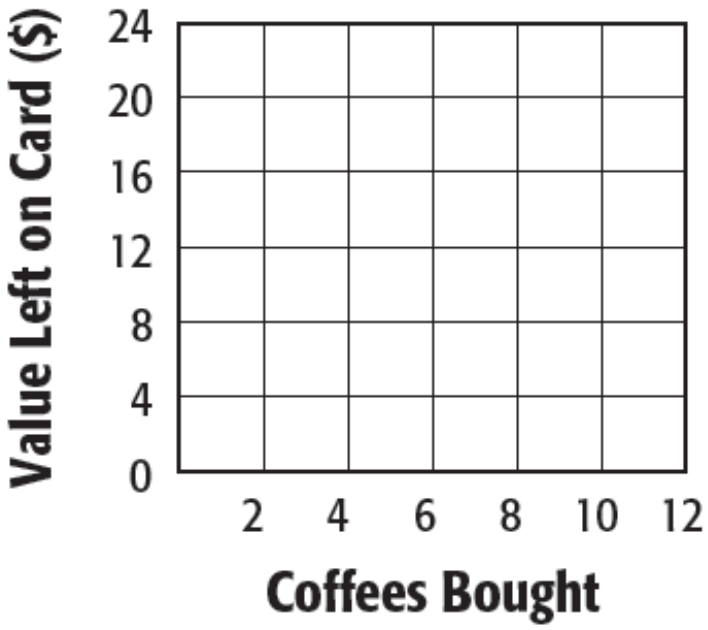


b. Use the graph to predict the time it takes the killer whale to travel 30 kilometers.

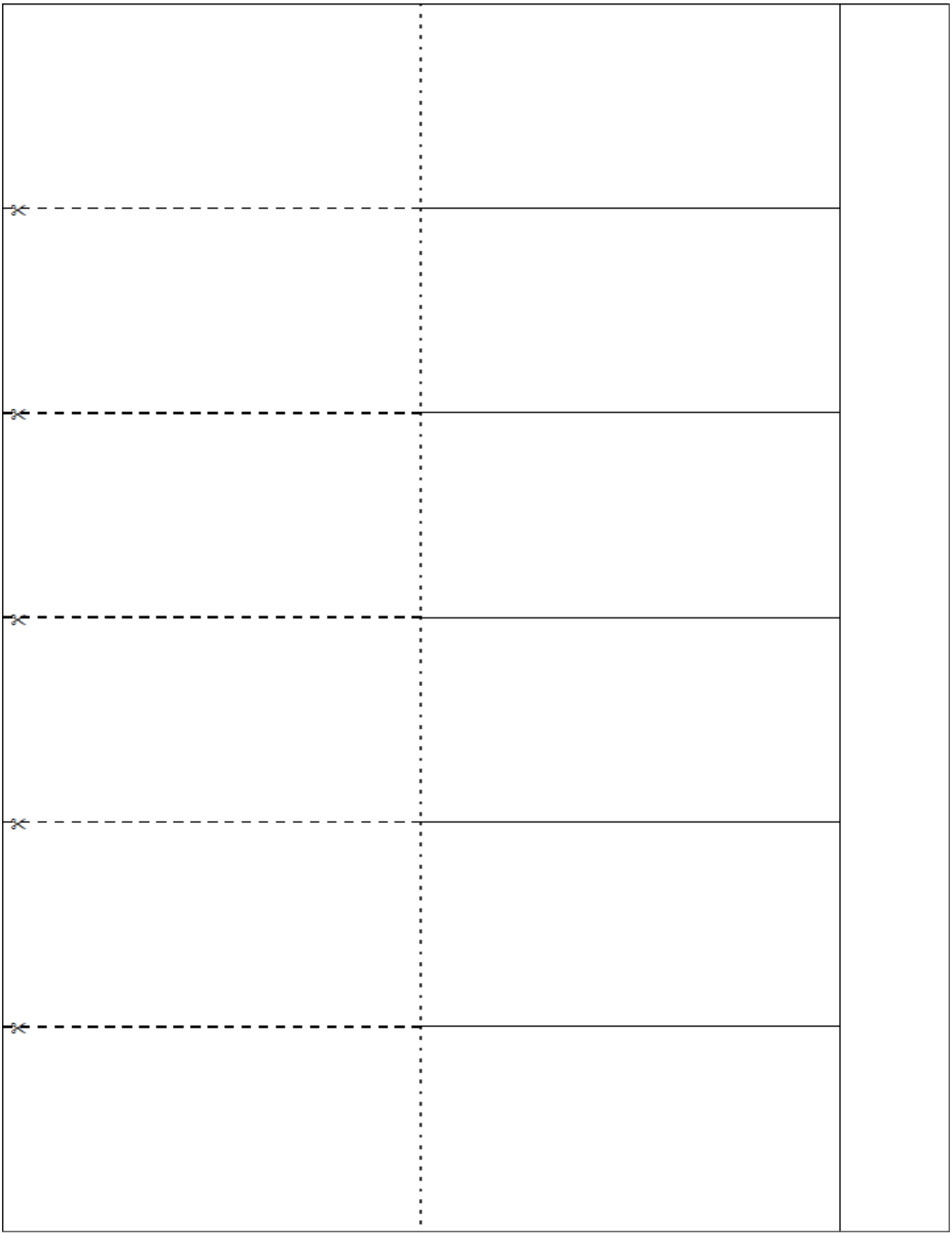
MUSIC Jessica wants to record her favorite songs to one CD. The function $C = 80 - 3.22n$ represents the recording time C available after n songs are recorded. Find the zero of this function. Describe what this value means in this context.



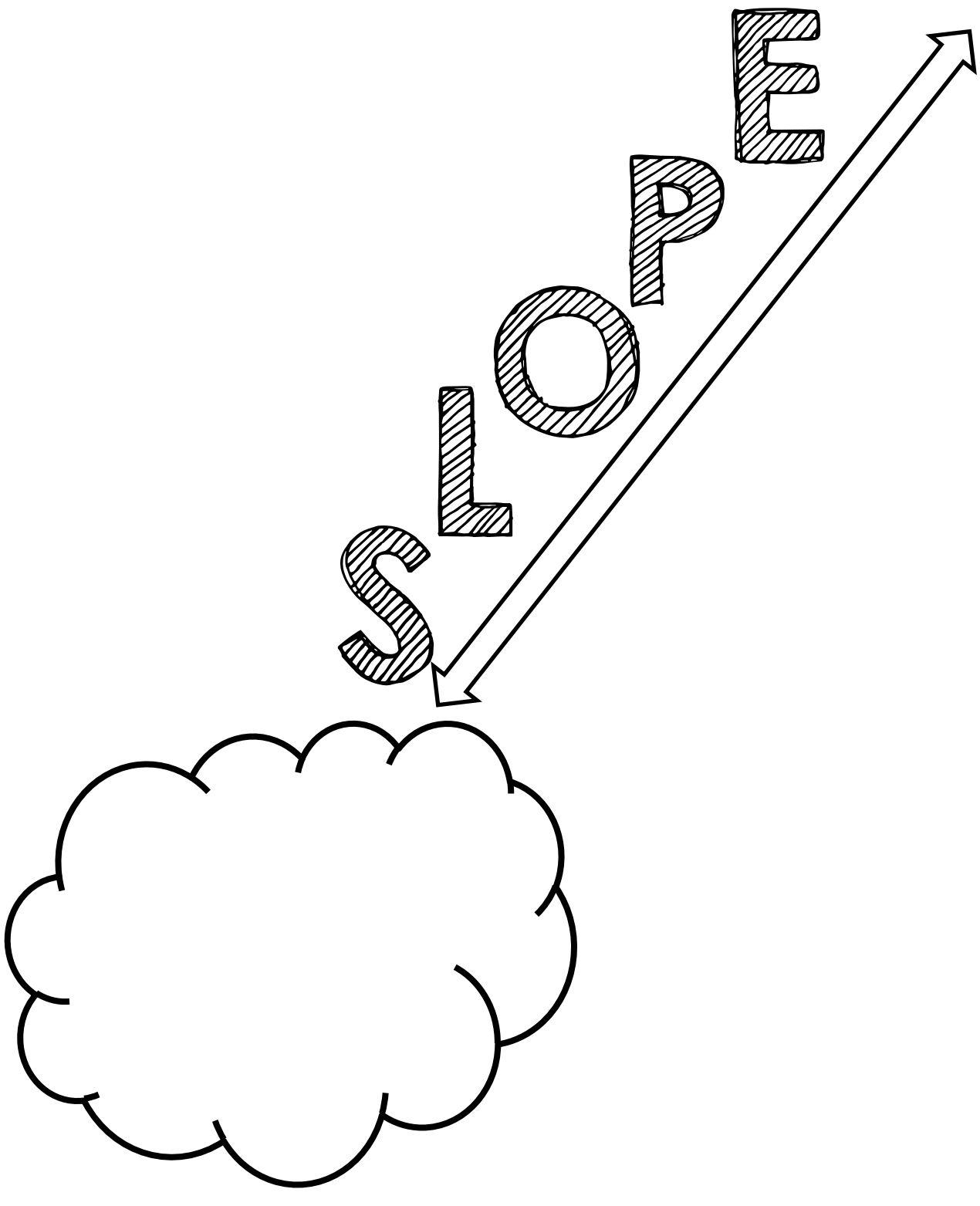
GIFT CARDS Enrique uses a gift card to buy coffee at a coffee shop. The initial value of the gift card is $20. The function $n = 20 - 2.75c$ represents the amount of money still left on the gift card n after purchasing c cups of coffee. Find the zero of this function. Describe what this value means in this context.



Slope Foldable



$$M = \frac{\quad}{\quad}$$



Slope doodle notes

Slope ski guy notes

Vux and Hox notes