4.1-4.3 Revisited

Graphing Using a Chart

1) Graph $y = 3x - 4$
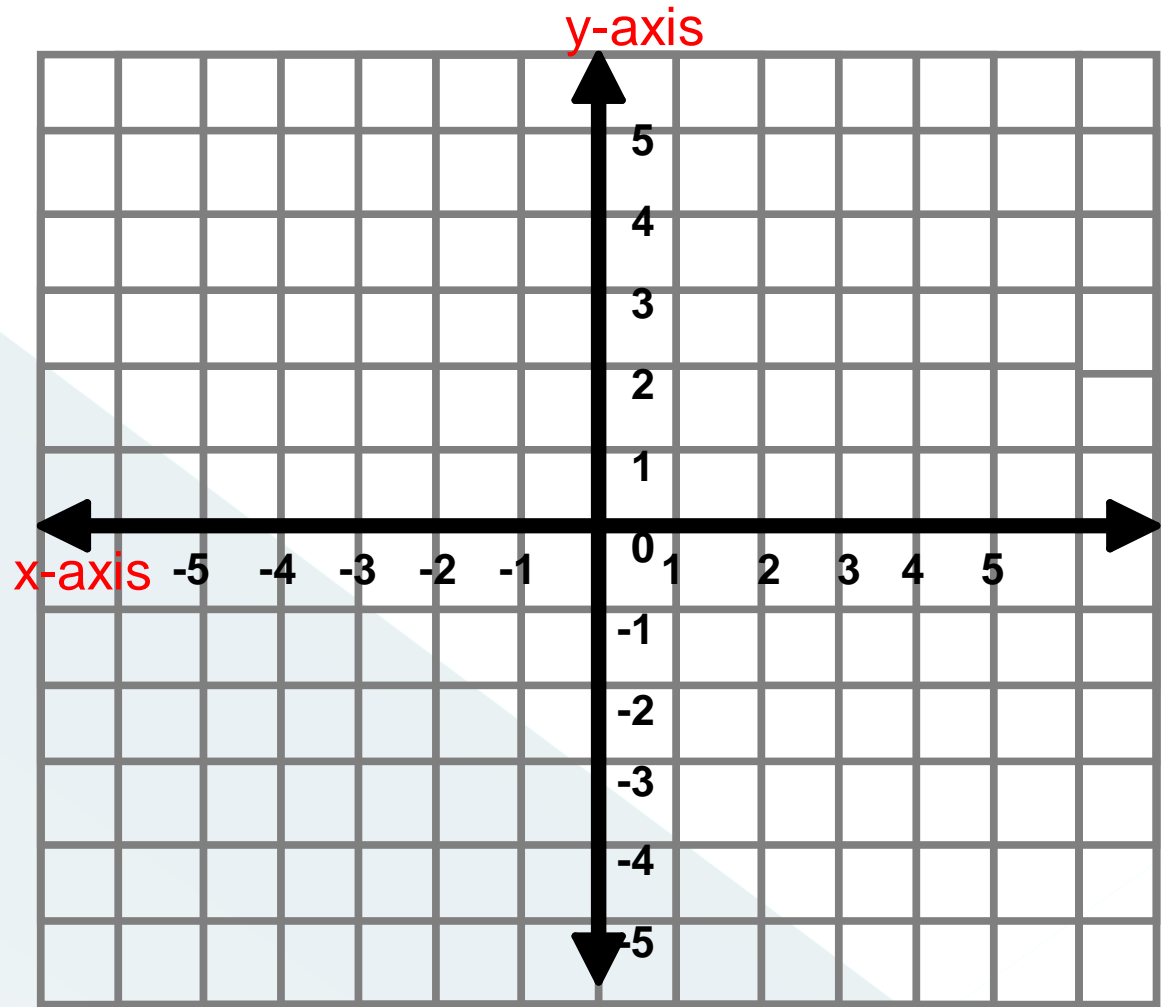
x		y
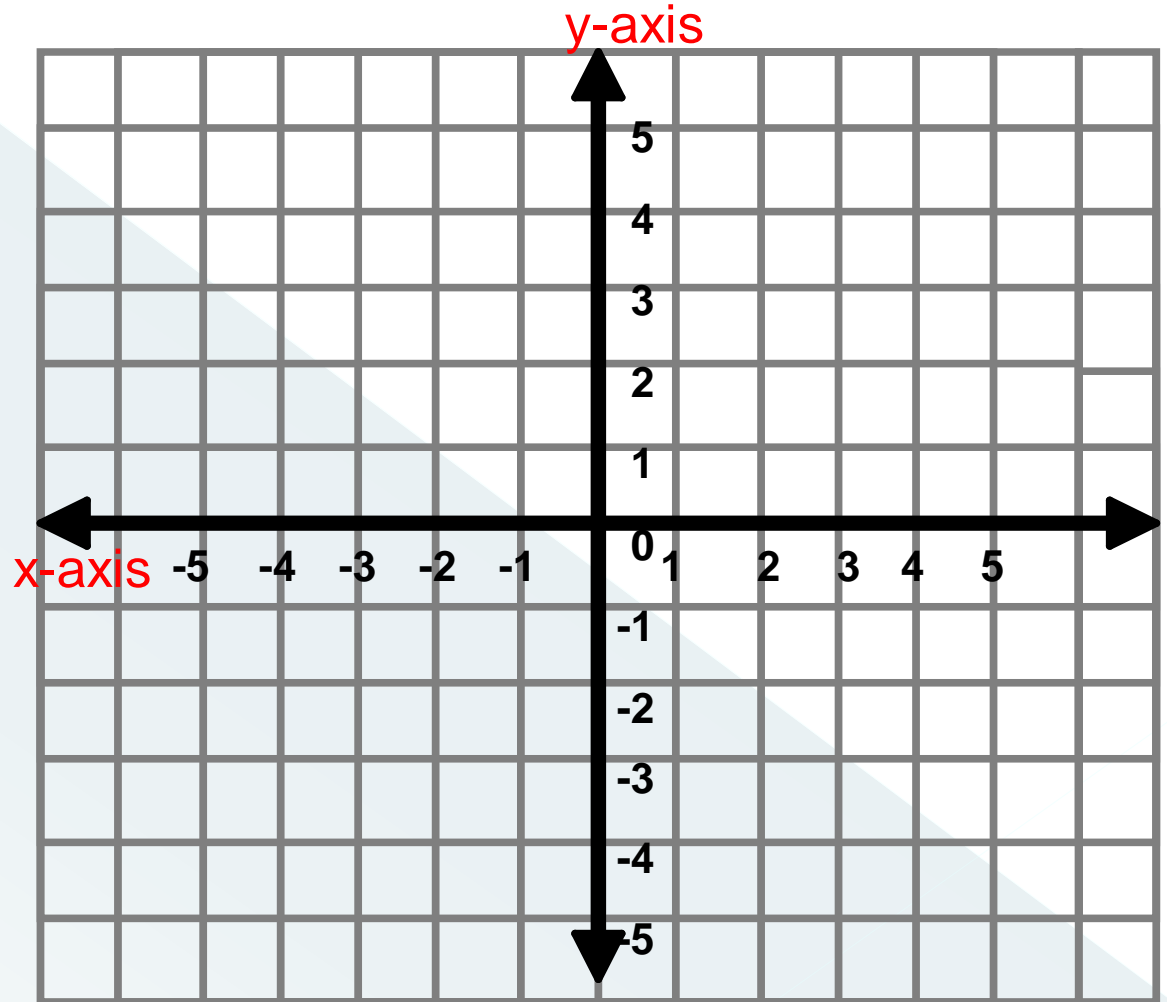
2) Graph the linear equation.

$$y = -2x + 1$$

x	y

2) Graph the linear equation.

$$-4x + y = -1$$

x	y
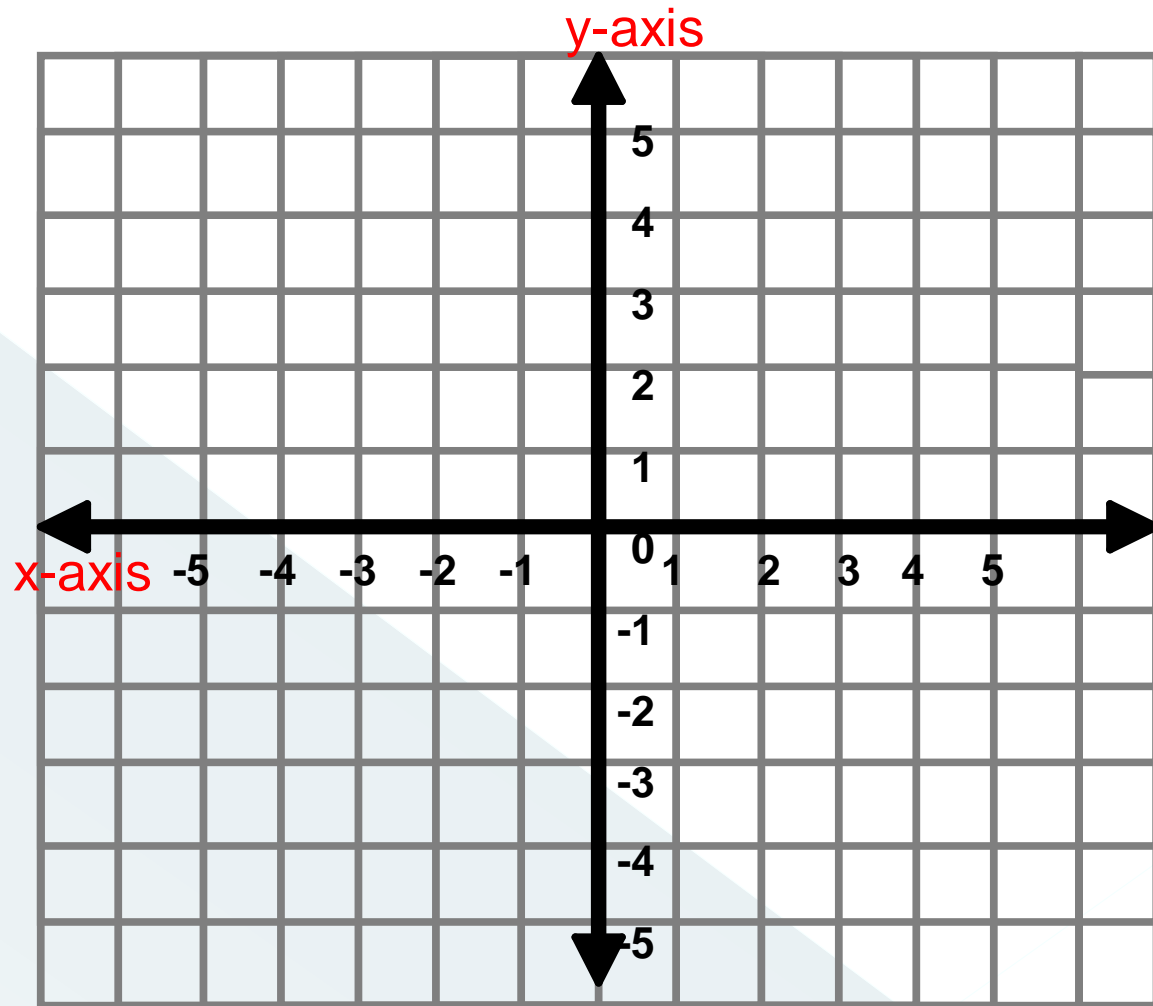
Using a T-Chart

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

x	y
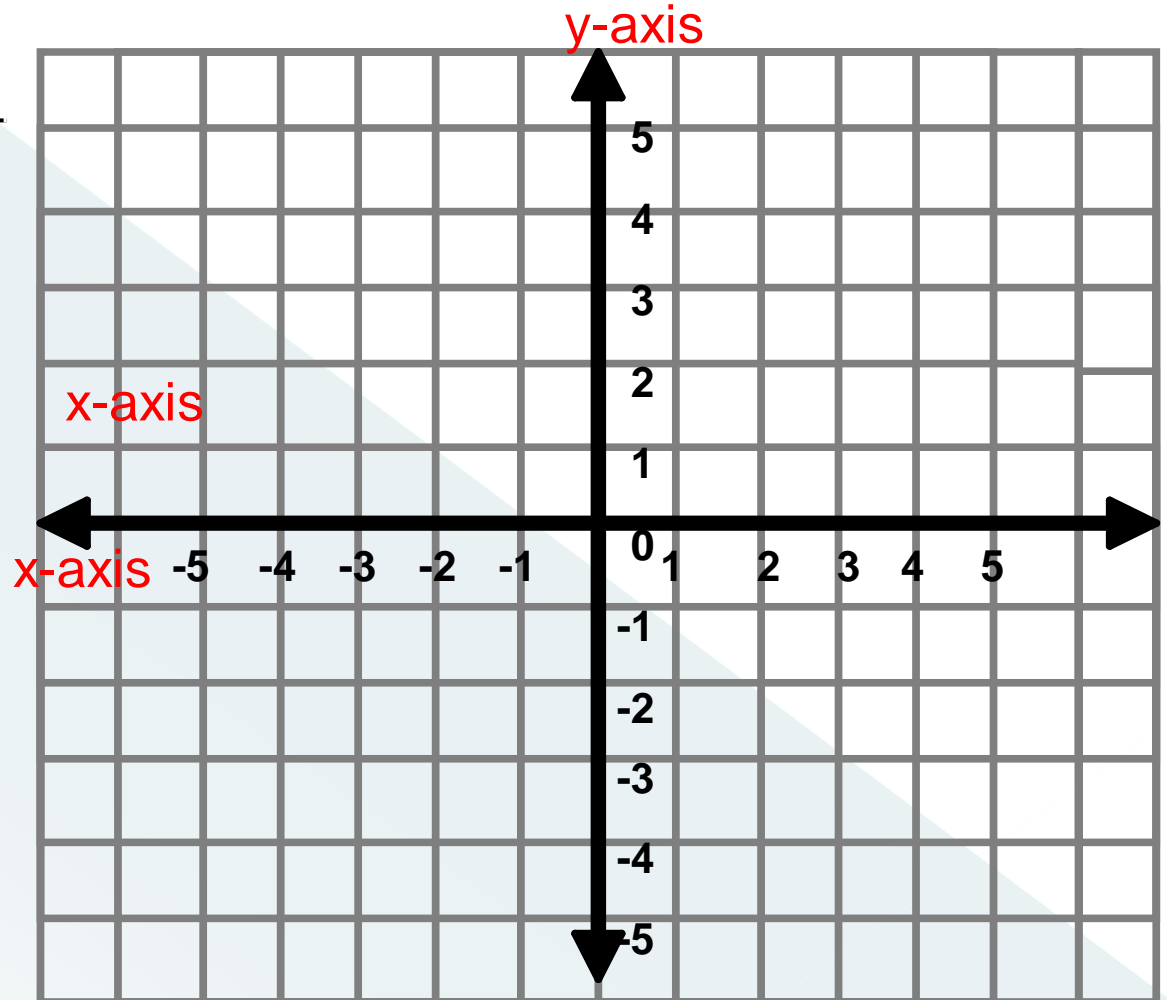
Graphing Horizontal and Vertical Lines

5) $y = -3$

x	y
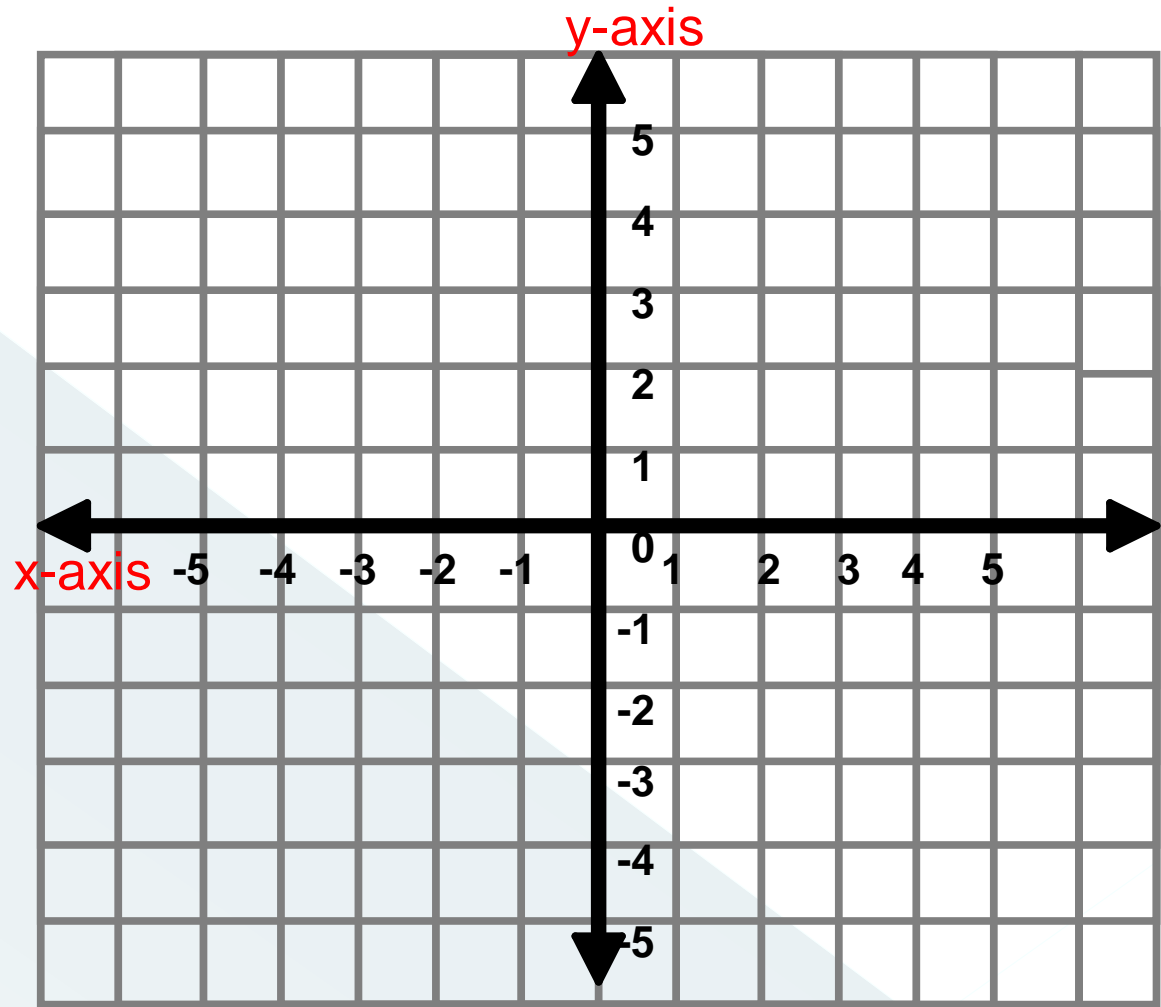
Graphing Horizontal and Vertical Lines

6) $x = 4$

x	y

SLOPE OF A LINE

Rise

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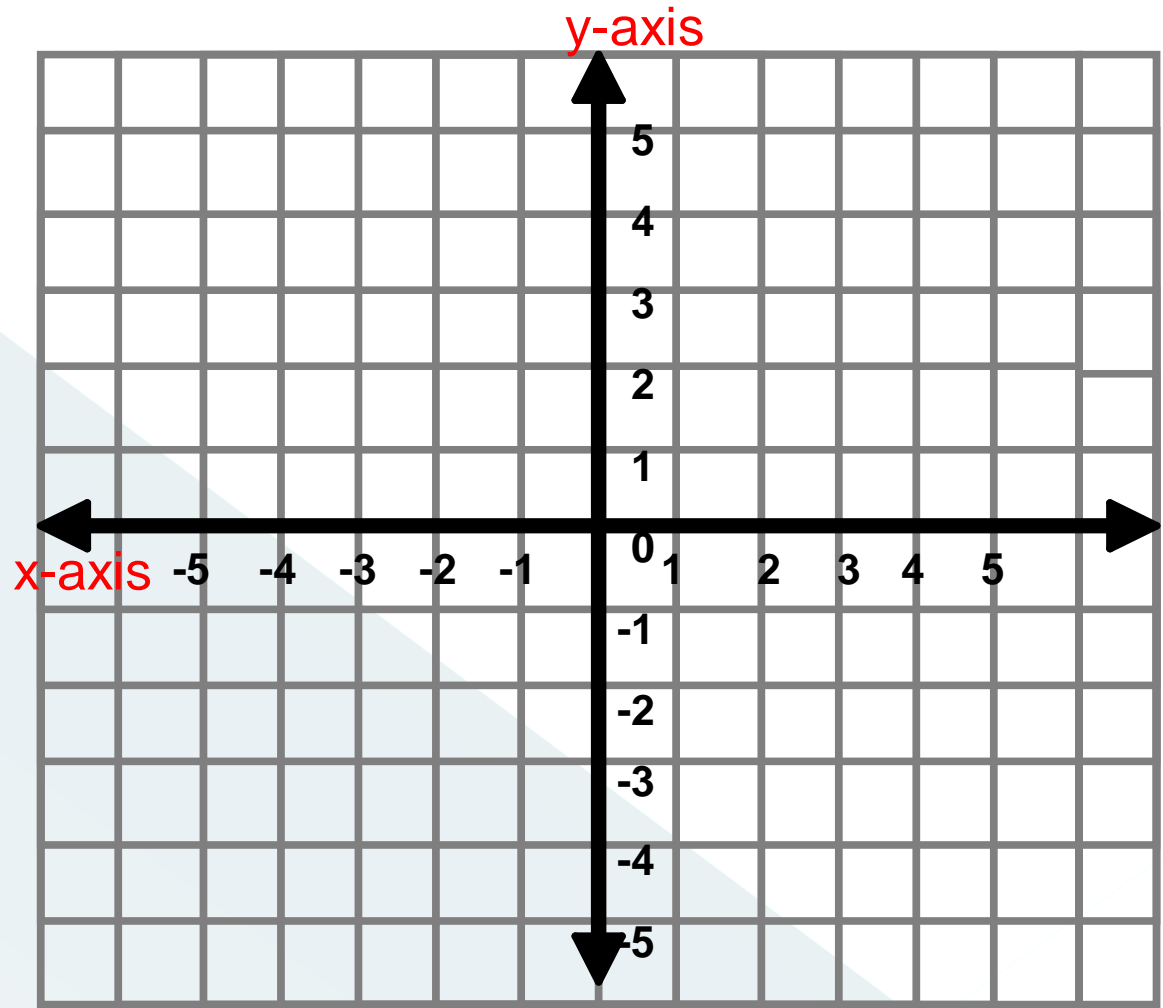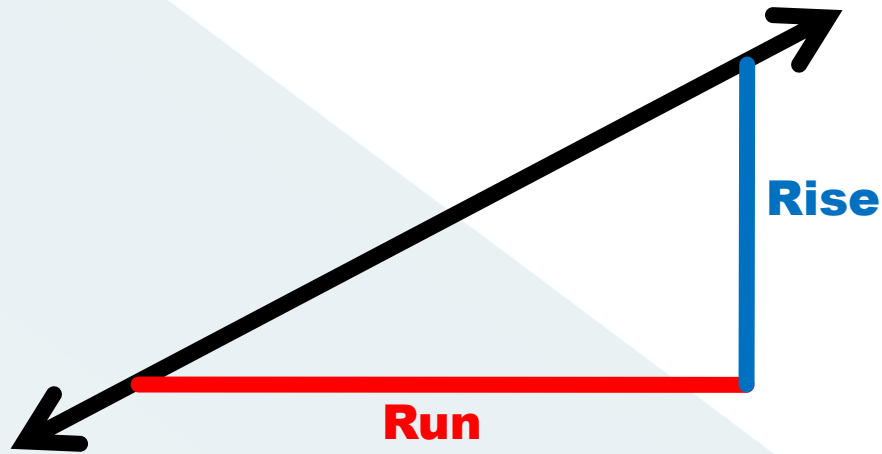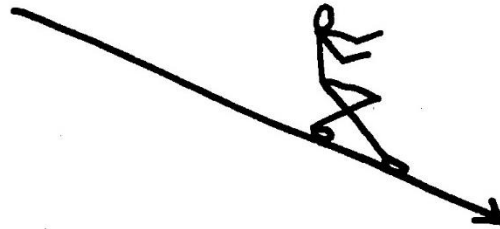
$$slope = \frac{rise}{run}$$

SLOPE OF A LINE
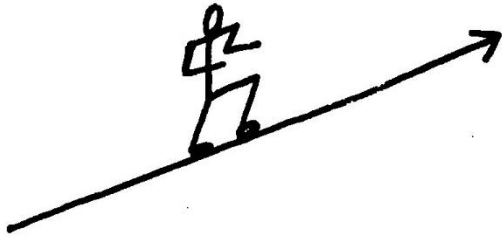
going up
positive slope

going down
negative slope

level
0 slope

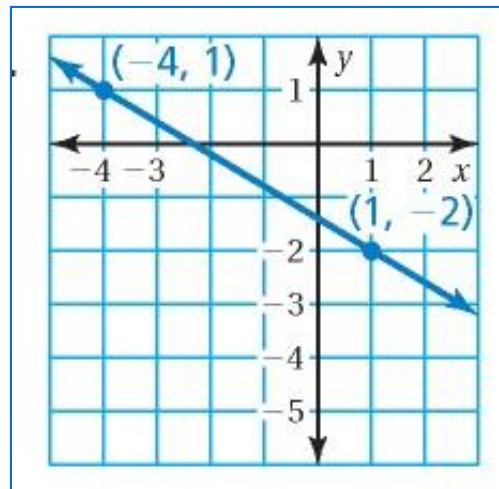**Find the slope of each line.**

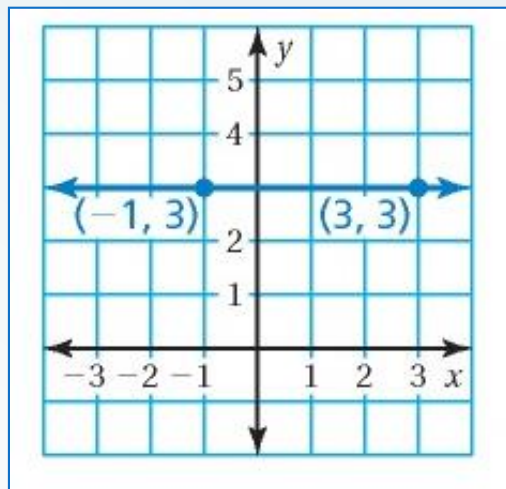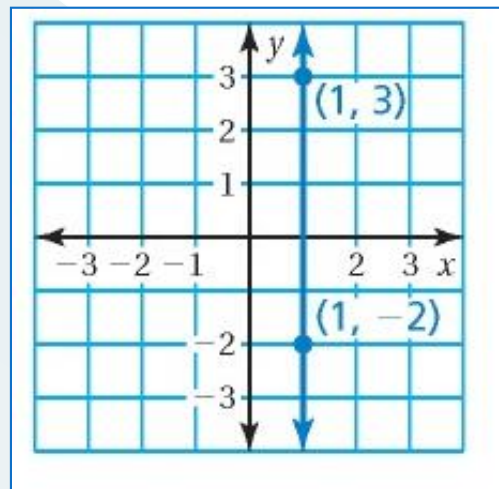$$slope = \frac{rise}{run}$$

7)
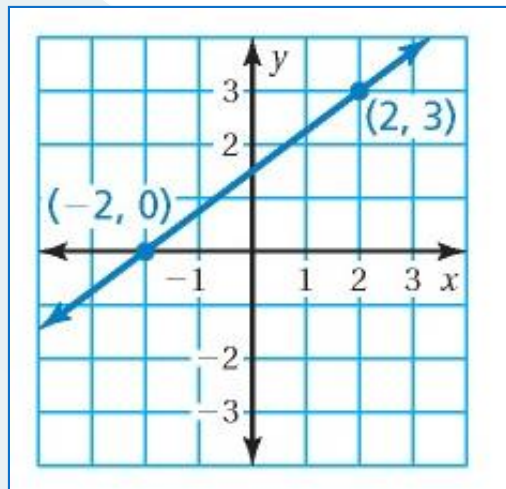
8)

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* $(9, 5)$

SLOPE FORMULA

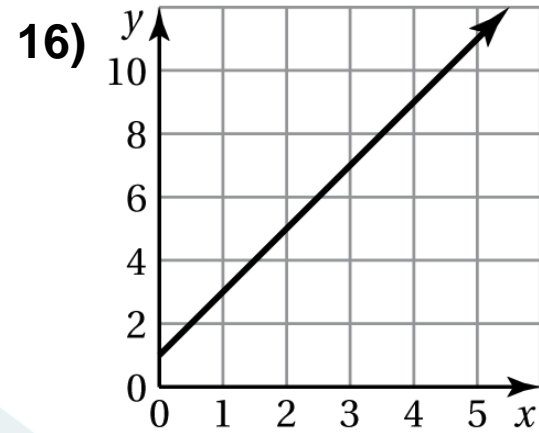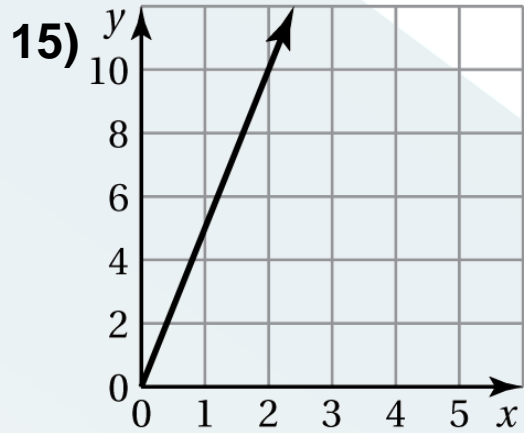$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Find the slope between the two points:

13) $(11, -8)$ ***and*** $(3, 4)$

14) $(-3, 9)$ ***and*** $(-3, 5)$

Practice

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

If so, write an equation that represents the relationship.

15)

16)

Tell whether *x* and *y* are in a proportional relationship. Explain your reasoning. If so, write an equation that represents the relationship.

17)

x	1	3	6	8
y	3	6	8	11

18)

x	4	8	12	16
y	2	4	6	8

Application

19) **The cost *y* (in dollars) for *x* gigabytes of data on an Internet plan is represented by $y = 10x$. Graph the equation and interpret the slope.**

a) Make a T-chart of this relationship if ***x*** represents the number of gigabytes and ***y*** represents the cost.

b) Make a line graph of this with at least three points and make sure to label the graph.

c) What is ***k***?

d) What is the slope?

e) What does the slope mean?