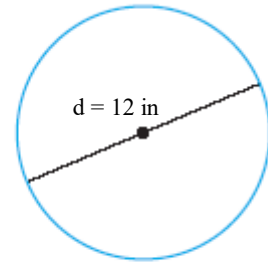


Student: _____
Date: _____

Instructor: Ray Brown
Course: M050 Sum17 CAI 10052 G43

Assignment: ch08_10rev HW

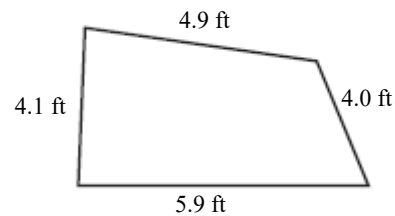
1. Find the area of the geometric figure. Use 3.14 as an approximation for π to approximate the area.



The approximate area of the geometric figure is _____ sq in.
(Type a decimal and round to three decimal places.)

Answer: 113.04

2. Find the perimeter of the polygon.



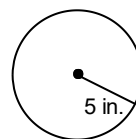
The perimeter of the polygon is _____ (1) _____ (Simplify your answer.)

- (1) square feet.
 feet.

Answers 18.9

(1) feet.

3. Determine the circumference and approximate area of the given circle, using 3.14 for π .



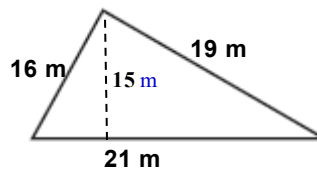
The circumference is _____ in.
(Type an integer or decimal rounded to the nearest tenth as needed.)

The area is _____ in.²
(Type an integer or decimal rounded to the nearest tenth as needed.)

Answers 31.4

78.5

4. Find the perimeter and area of the polygon. All measurements are in meters.



The perimeter of the polygon is _____ meters.

The area of the polygon is _____ square meters.
(Round to 1 decimal place as needed.)

Answers 56

157.5

5. Click the link below to watch a video reviewing concepts in this chapter. You are encouraged to watch the video and work problems with the instructor to help ensure your understanding of the material.

Chapter 10 Review¹

- True - I understand the concept.
 False - I am not understanding the concept and intend to seek assistance.

1: <http://www.screencast.com/t/hdgCN7lxsCg7>

Answer: True - I understand the concept.

6. If a line has no y-intercept, what can be said about the line?

Choose the correct answer below.

- A. It is vertical.
 B. It is slanted with positive slope.
 C. It is slanted with negative slope.
 D. It is horizontal.

Answer: A. It is vertical.

7. Which statements are true about the graph of $Ax + By = C$?

Select all that apply.

- A. If $A \neq 0$ and $B \neq 0$, the line is neither horizontal nor vertical.
 B. If $A = 0$ and $B \neq 0$, the line is horizontal.
 C. If $A = 0$ and $B = 0$, the line is either horizontal or vertical.
 D. If $A \neq 0$ and $B = 0$, the line is vertical.

Answer: A. If $A \neq 0$ and $B \neq 0$, the line is neither horizontal nor vertical., B. If $A = 0$ and $B \neq 0$, the line is horizontal., D.
 If $A \neq 0$ and $B = 0$, the line is vertical.

8. When graphing $2x + 3y = 6$ by using intercepts, what two points should the line pass through?

Choose the correct answer below.

- A. (2,0) and (0,3)
- B. (3,0) and $\left(0, \frac{3}{2}\right)$
- C. (3,0) and (0,2)
- D. $\left(\frac{3}{2}, 0\right)$ and (0,3)

Answer: C. (3,0) and (0,2)

9. Plot the given ordered pairs in the same xy -plane. If possible, state the quadrant in which each of the points is located.

$(0,7)$, $(6, -2)$, and $(-5, -7)$

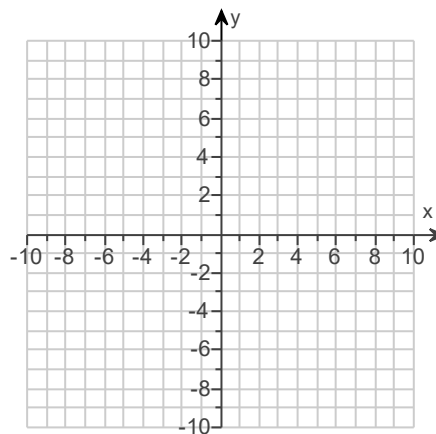
Use the graphing tool to plot the given points.

Complete the statements below.

The point $(0,7)$ is (1) _____

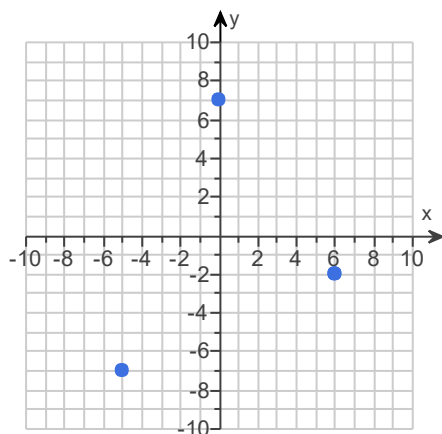
The point $(6, -2)$ is (2) _____

The point $(-5, -7)$ is (3) _____



- (1) in quadrant I. not in any quadrant. in quadrant II. in quadrant III. in quadrant IV.
- (2) in quadrant I. not in any quadrant. in quadrant II. in quadrant III. in quadrant IV.
- (3) in quadrant I. not in any quadrant. in quadrant II. in quadrant III. in quadrant IV.

Answers



- (1) not in any quadrant.
 (2) in quadrant IV.
 (3) in quadrant III.

10. If possible, identify the quadrant in which each point is located.

(a) (4,0) (b) (0.1,3)

(a) Identify the quadrant in which the point (4,0) is located. Choose the correct answer below.

- A. IV
 B. II
 C. I
 D. III
 E. None of the above

(b) Identify the quadrant in which the point (0.1,3) is located. Choose the correct answer below.

- A. II
 B. I
 C. IV
 D. III
 E. None of the above

Answers E. None of the above

B. I

11. Determine whether the ordered pair is a solution to the given equation.

$$5x - y = -30, (-5,9)$$

The ordered pair $(-5,9)$ (1) _____ a solution to the equation $5x - y = -30$.

- (1) is
 is not

Answer: (1) is not

12. Use the given values of the variable to make a table of solutions for the equation.

$$y + x = 2 \quad y = -2, 0, 2, 4$$

x				
y	-2	0	2	4

(Type integers or simplified fractions.)

Answers 4

2
0
-2

13. If possible, find the slope of the line. Interpret the slope in terms of rise and run.

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

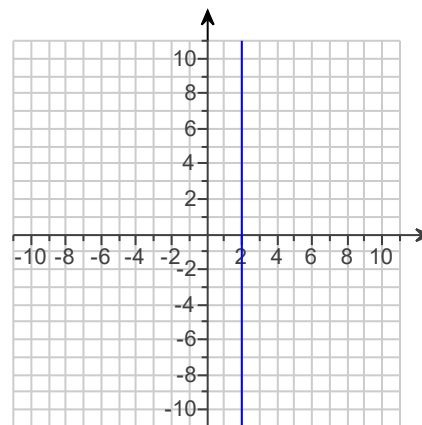
- A. The slope of the line is $m = \underline{\hspace{2cm}}$.
(Simplify your answer. Type an integer or a fraction.)
- B. The slope is undefined.

Interpret the slope in terms of rise and run. Choose the correct answer below.

- A. The slope is undefined.
- B. The line decreases from left to right.
- C. The line increases from left to right.
- D. The line does not rise or fall for every 1 horizontal unit of run.

Answers B. The slope is undefined.

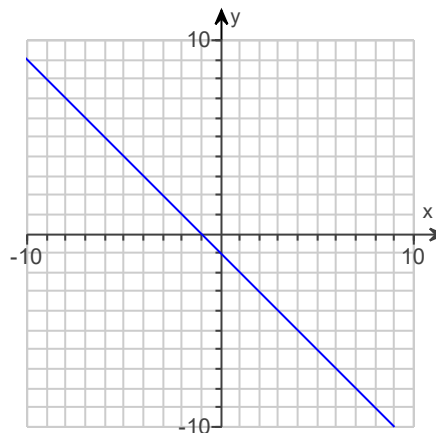
A. The slope is undefined.



14. For the graph on the right, determine if the slope is positive, negative, or zero.

The slope is

- A. zero.
- B. positive.
- C. negative.

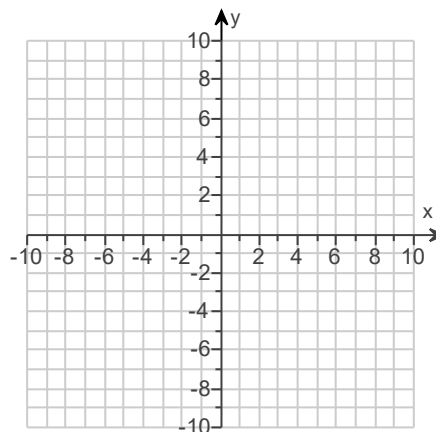


Answer: C. negative.

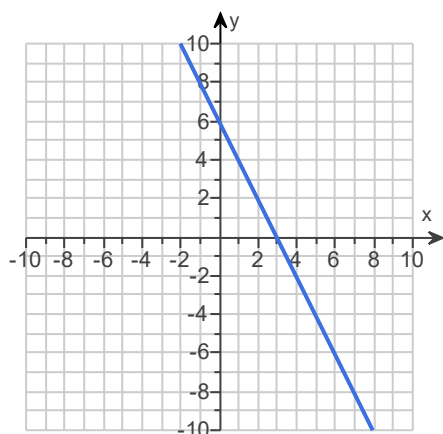
15. Sketch a line passing through the point and having slope m .

$$(0,6), m = -2$$

Use the graphing tool to graph the equation.



Answer:



16. Complete the following parts for $x - 4y = -20$.

(a) Write the equation in slope-intercept form.

(b) Give the slope and y-intercept of the line.

(a) The slope-intercept form of the line is $y = \underline{\hspace{2cm}}$.

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

(b) The slope is $\underline{\hspace{2cm}}$. (Type an integer or a fraction.)

The y-intercept is $\underline{\hspace{2cm}}$. (Type an integer or a fraction.)

Answers $\frac{1}{4}x + 5$

$$\frac{1}{4}$$

$$5$$

17. Find any intercepts for the graph of the equation and then graph the linear equation.

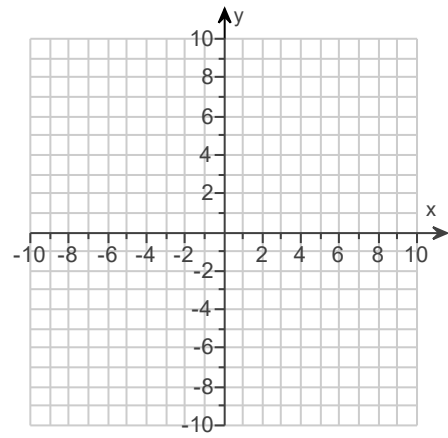
$$x - 3y = 6$$

The x intercept is _____.

The y-intercept is _____.

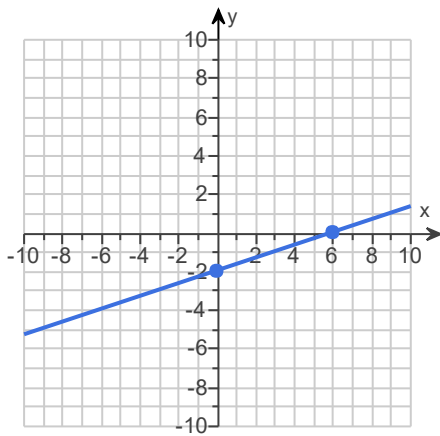
(Type an integer or a fraction.)

Use the graphing tool to graph the equation. Use the intercepts when drawing the line.



Answers 6

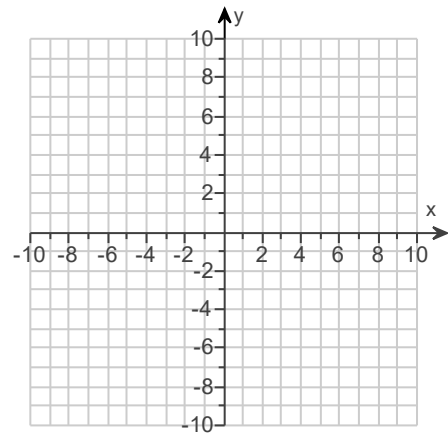
- 2



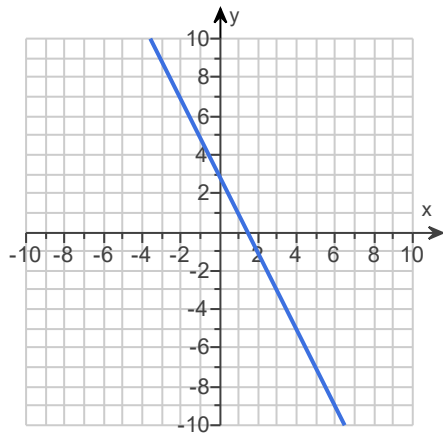
18. Graph the equation.

$$y = 3 - 2x$$

Use the graphing tool on the right to graph the equation.



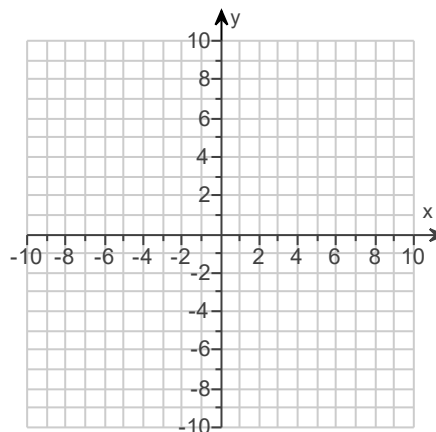
Answer:



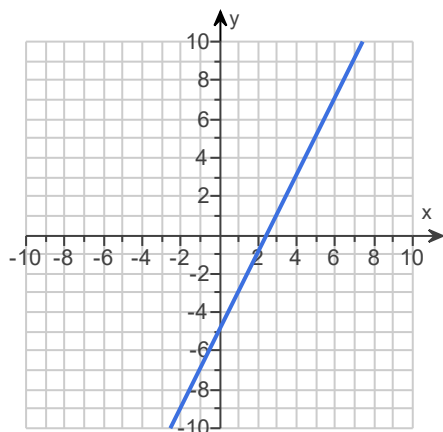
19. Graph the equation.

$$6x - 3y = 15$$

Use the graphing tool to graph the equation.



Answer:



20. Find the slope of the line that goes through the given points.

$$(2, 7) \text{ and } (0, -7)$$

Select the correct choice below and, if necessary, fill in the answer box to complete your choice.

- A. The slope is _____ . (Type an integer or a simplified fraction.)
- B. The slope is undefined.

Answer: A. The slope is 7 . (Type an integer or a simplified fraction.)

21. The table on the right shows points that all lie on the same line. Find the slope-intercept form for the line.

x	0	1	2
y	8	12	16

The slope-intercept form of the line is $y = \underline{\hspace{2cm}}$.
(Use integers or fractions for any numbers in the expression.)

Answer: $4x + 8$

22. Write an equation of the line containing the given point and perpendicular to the given line.

$$(0,5); 8x + 9y = 7$$

The equation of the line is $y =$ _____.

(Simplify your answer. Use integers or fractions for any numbers in the expression.)

Answer: $\frac{9}{8}x + 5$

23. Find the slope-intercept form of the line satisfying the given conditions.

$$\text{Slope } \frac{3}{4}, \text{ y-intercept } 4.$$

The slope-intercept form of the line is $y =$ _____.

(Use integers or fractions for any numbers in the expression.)

Answer: $\frac{3}{4}x + 4$

24. Find the slope-intercept form of the line satisfying the given conditions.

$$\text{Parallel to } 4x + 20y = 27, \text{ passing through } (1,7).$$

The slope-intercept form of the line is $y =$ _____.

(Use integers or fractions for any numbers in the expression.)

Answer: $-\frac{1}{5}x + \frac{36}{5}$

25. Find a point-slope equation of the line having the given slope and containing the given point.

$$m = -4; (9,2)$$

The equation of the line in point-slope form is $y -$ _____ $=$ _____ $(x -$ _____ $)$.

Answers 2

- 4

9

26. Write the equation in slope-intercept form.

$$y - 4 = \frac{1}{4}(x + 16)$$

The equation is $y = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}$.

Answers $\frac{1}{4}$
8

27. Write the equations of a horizontal line and a vertical line that pass through the given point.

(0,8)

Write the equation of the horizontal line.

Write the equation of the vertical line.

Answers $y = 8$
 $x = 0$

28. Find the slope-intercept form for the line satisfying the conditions.

Perpendicular to $y = -\frac{1}{5}x + 3$, passing through the point (5, -6)

The equation of the line is _____.
(Type your answer in slope-intercept form.)

Answer: $y = 5x - 31$

29. The points in the table lie on a line. Find the slope-intercept form of the line.

x	1	3	5	7
y	-3	-7	-11	-15

The slope-intercept form of the line is _____ . (Type an equation.)

Answer: $y = -2x - 1$

30. The points in the table lie on a line. Find the slope-intercept form of the line.

x	4	6	8	10
y	-16	-15	-14	-13

The slope-intercept form of the line is _____ . (Simplify your answer.)

Answer: $y = \frac{1}{2}x - 18$