

Name:
Instructor:

Date:
Section:

Practice Set 3.1

Use the choices below to fill in each blank.

x -axis
 y -axis

infinite
finite

nonlinear
linear

three
five

- A linear equation has a(n) _____ number of solutions.
- The horizontal axis of the coordinate plane is called the _____.
- The vertical axis of the coordinate plane is called the _____.
- An equation whose graph is a straight line is called a(n) _____ equation.
- An equation whose graph is not a straight line is called a(n) _____ equation.

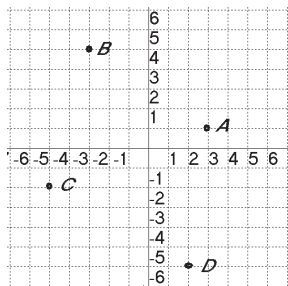
List the coordinates of each point and write the quadrant in which the point is located.

6. A

7. B

8. C

9. D



6. _____

7. _____

8. _____

9. _____

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

10. $y = 2x + 3$; $(2, 7)$

11. $y = \sqrt{x}$; $(-4, 2)$

10. _____

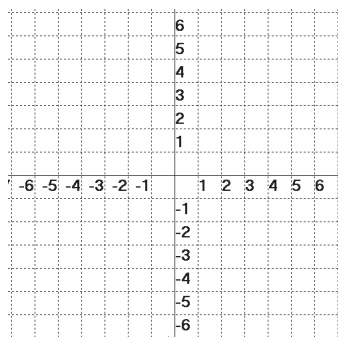
11. _____

Graph each equation.

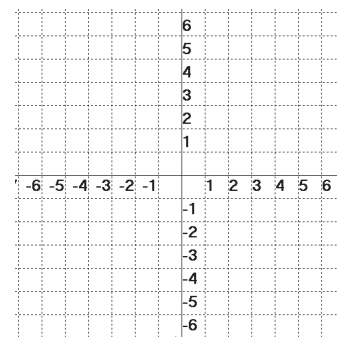
12. $y = 2x + 1$

13. $y = -\frac{1}{2}x - 3$

x	y
-2	
-1	
0	
1	
2	



x	y
-4	
-2	
0	
2	
4	

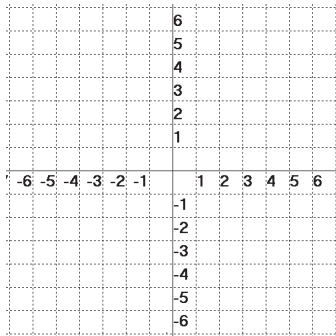


Practice Set 3.1

Graph each equation.

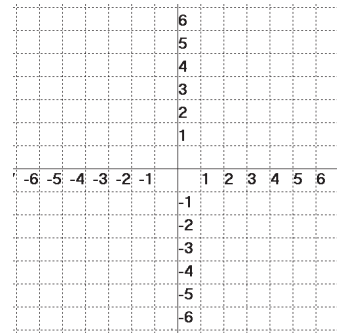
14. $y = x^2 - 3$

x	y
-2	
-1	
0	
1	
2	



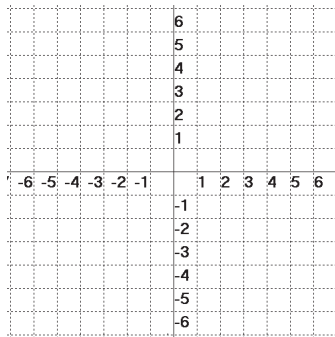
15. $y = |x| - 1$

x	y
-2	
-1	
0	
1	
2	



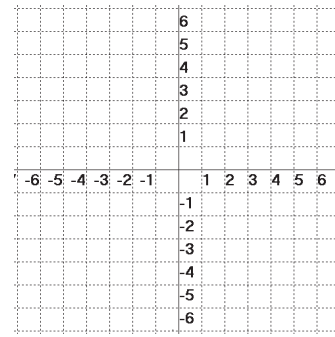
16. $y = \frac{1}{x+1}$

x	y
-4	
-3	
-2	
$-3/2$	
$-1/2$	
0	
1	
2	
3	
4	



17. $y = \sqrt{x+1}$

x	y
-1	
0	
3	

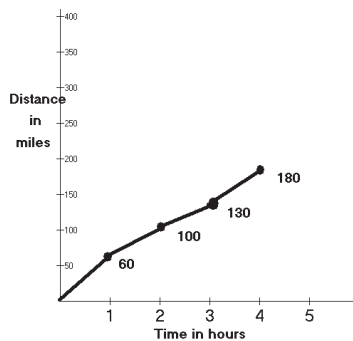


Match the description with the corresponding graph.

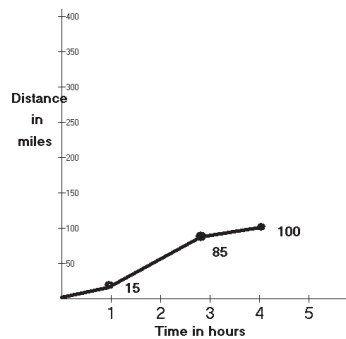
18. Train A traveled at a speed of 15 mph for 1 hour, then 35 mph for 2 hours, and then 15 mph for 1 hour.

19. Train B traveled at a speed of 60 mph for 1 hour, then 40 mph for 1 hour, then 30 mph for 1 hour, and then 50 mph for 1 hour.

18. _____
19. _____



A



B