

3.2 Graphing Linear Equations Name _____

Determine if the ordered pair is a solution of the equation.

1. $2x + 3y = 5$

(a) (1, 1)

(b) (4, -1)

(c) (-1, 2)

2. $-3x + 4y = -5$

(a) (1, 2)

(b) (3, 1)

(c) (0, -1.25)

Complete the ordered pairs so they will be solutions of the given equation.

3. $y = 3x - 5$

(a) (1, _____)

(b) (-2, _____)

(c) (_____, 10)

4. $y = -4x + 1$

(a) (2, _____)

(b) (-3, _____)

(c) (_____, -3)

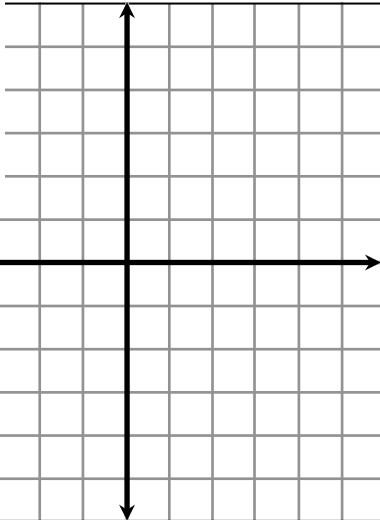
Answers: **1.** **(a)** yes, **(b)** yes, **(c)** no; **3.** **(a)** -2, **(b)** -11, **(c)** 5;

Complete a table of values for each equation and graph the equations.

5.

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

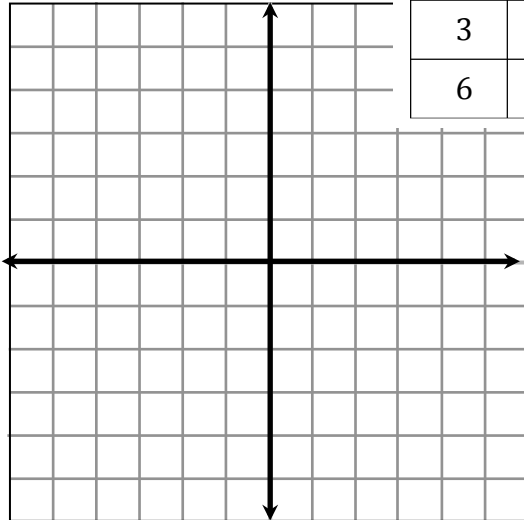
x	y
-4	
-2	
0	
2	
4	



6.

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

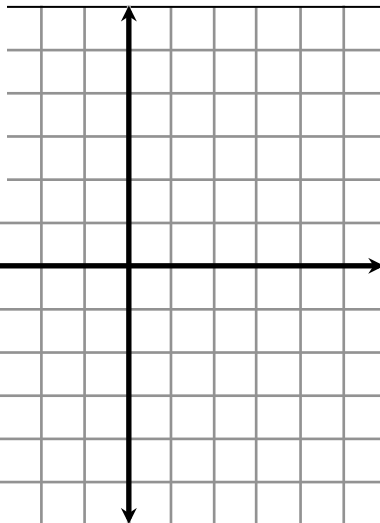
x	y
-6	
-3	
0	
3	
6	



7.

$$y = 3x$$

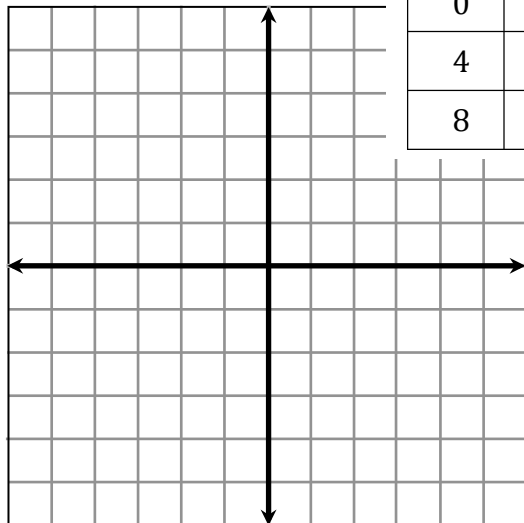
x	y
-2	
-1	
0	
1	
2	



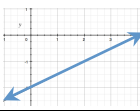
8.

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

x	y
-8	
-4	
0	
4	
8	



Answers: 5.



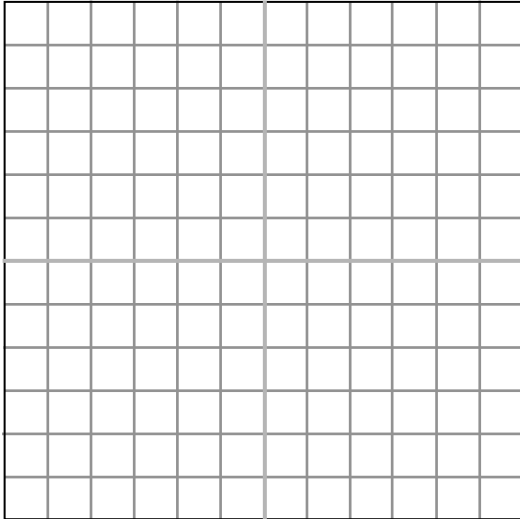
; 7.



Find the x -intercept and the y -intercept and use them to graph each equation.

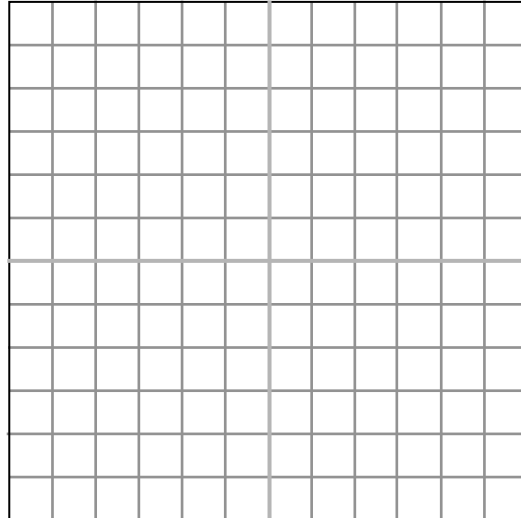
9. $3x + 4y = 12$

	x	y
x -intercept		0
y -intercept	0	



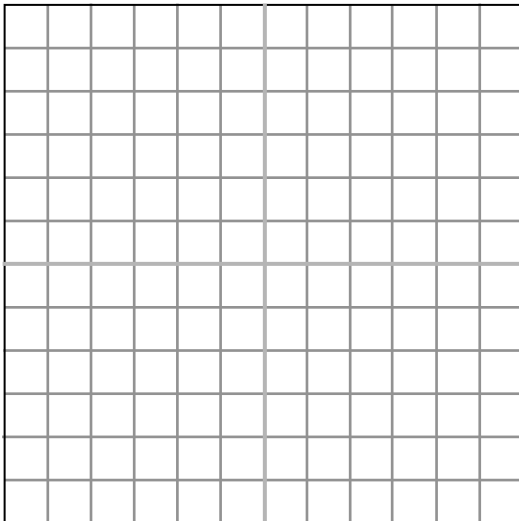
10. $5x - y = 10$

	x	y
x -intercept		0
y -intercept	0	



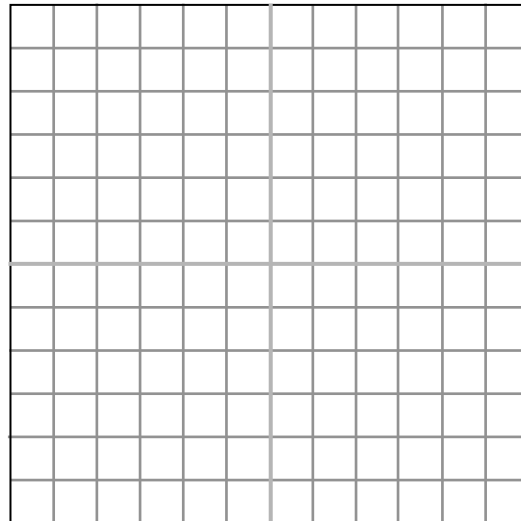
11. $-2x + 4y = 8$

	x	y
x -intercept		0
y -intercept	0	

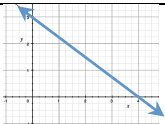


12. $-4x + 10y = 20$

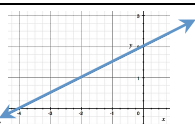
	x	y
x -intercept		0
y -intercept	0	



Answers: 9.

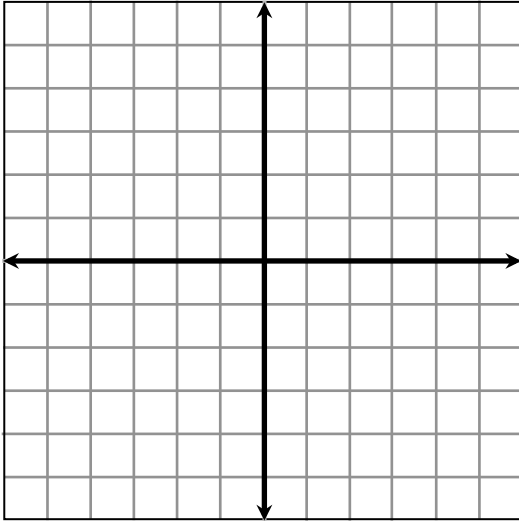


11.

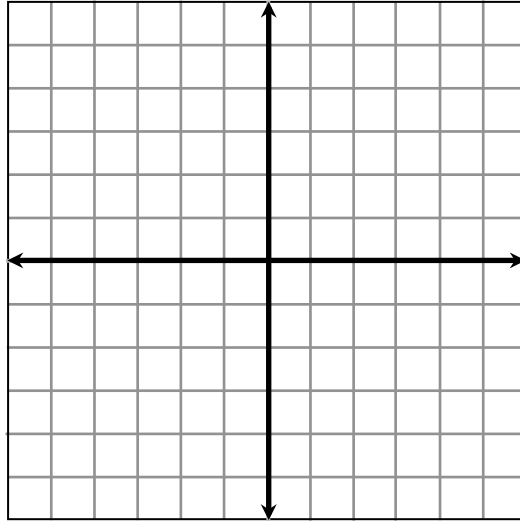


Graph by any method.

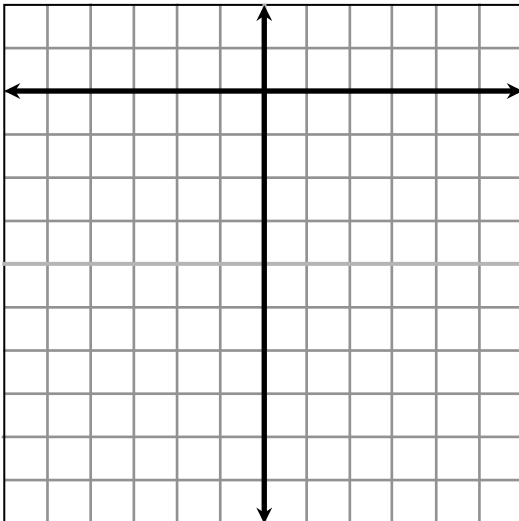
13. $y = -2$



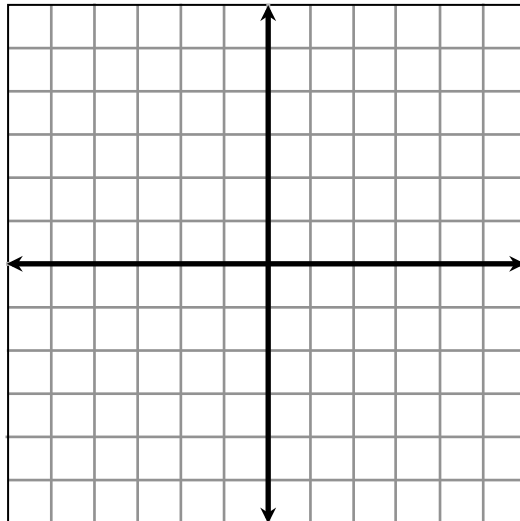
14. $x = 1$



15. $2x - y = 5$



16. $x + 2y = 4$

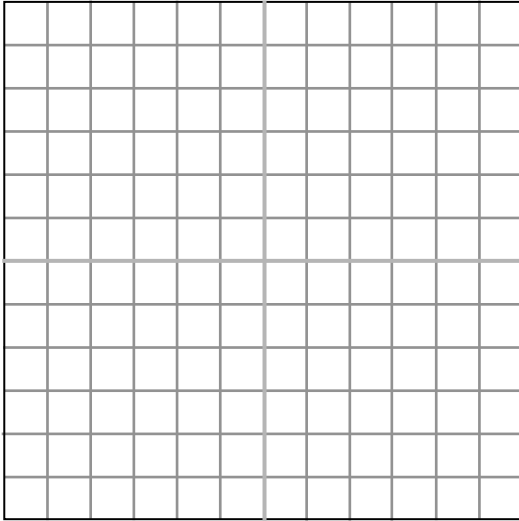


Answers: 13. 

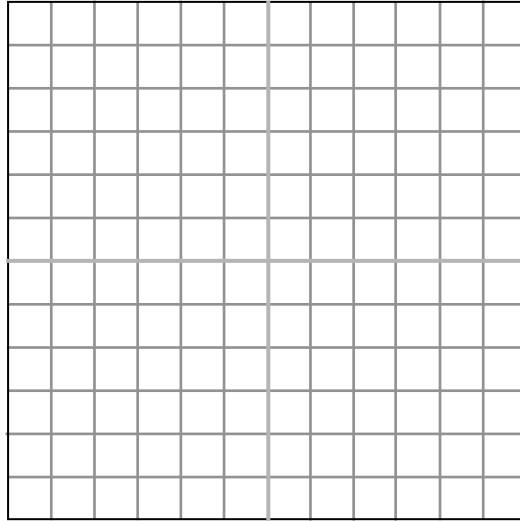
15. 

Graph by any method.

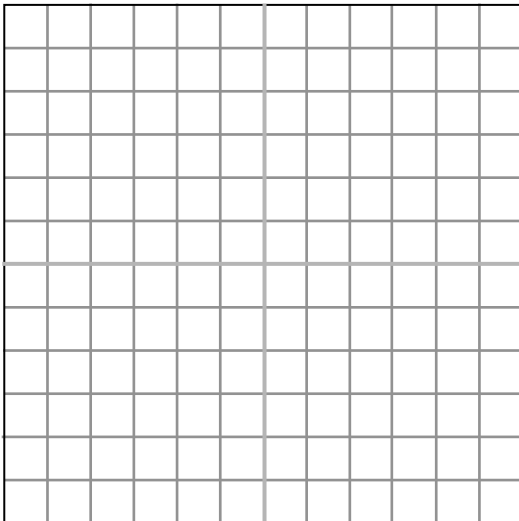
17. $x = y$



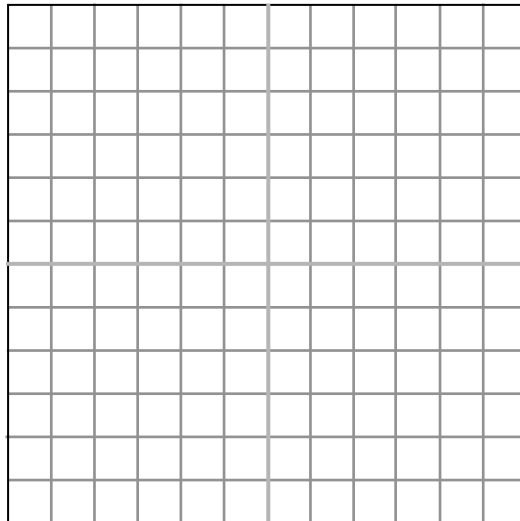
18. $x + y = 1$



19. $y = -\frac{1}{3}x + 1$

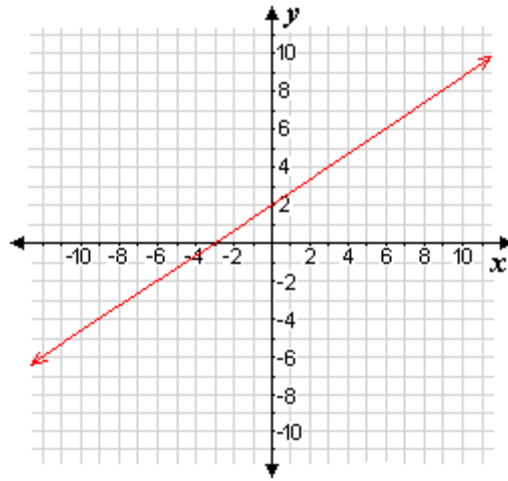


20. $y = \frac{1}{2}x - 3$



Answers: 17.  ; 19. 

Use the graph to find the requested x or y value.



21. If $x = 3$, find y .

22. If $x = 0$, find y .

23. If $x = -6$, find y .

24. If $x = -3$, find y .

25. If $y = -4$, find x .

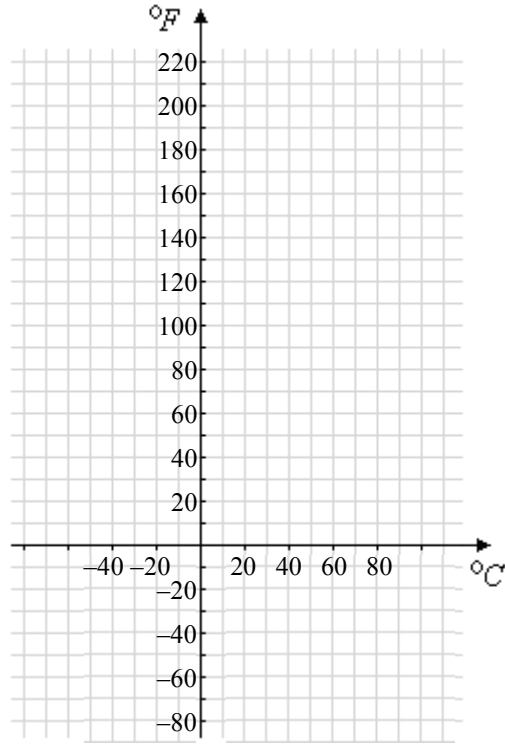
26. If $y = 0$, find x .

Answers: 21. 4; 23. -2; 25. -9

Using the Celsius to Fahrenheit conversion formula given below, fill in the table by converting each Celsius temperature to Fahrenheit. Then plot the values on the coordinate plane provided.

$$F = \frac{9}{5}C + 32$$

C	F
-25	
0	
25	
50	
75	
100	



Use the graph to convert each given temperature from Fahrenheit to Celsius or Celsius to Fahrenheit.

27. 60° C

28. 10° C

29. 212° F

30. 41° F

31. -5° C

32. -22° F

Answers: 27. 140° F; 29. 100° C; 31. 23° F