Name _____ Period _____

Int2 | **Practice Test Linear Equations** | **Unit 3**

Fill in the blank from the word bank.

diagonal/slanted
slope
vertical
***x*-intercept**
horizontal
***y*-intercept**

1. In the equation $y = mx + b$, b stands for _____.

2. In the equation $y = mx + b$, m stands for _____.

3. The graph of the line $x = 2$ is _____.

4. The graph of the line $y = 5$ is _____.

5. The graph of the line $y = -x$ is _____.

Identify the slope and *y*-intercept from the equation.

6. $y = -2x$

$m =$ _____ $b =$ _____

7. $x = 5$

$m =$ _____ $b =$ _____

8. $y = \frac{1}{2}x - 4$

$m =$ _____ $b =$ _____

9. $y = x$

$m =$ _____ $b =$ _____

10. $y = -3$

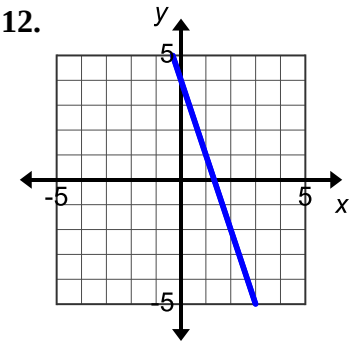
$m =$ _____ $b =$ _____

11. $y = 4x + 8$

$m =$ _____ $b =$ _____

Identify the slope and *y*-intercept from the graph; then <u>write the equation</u>.

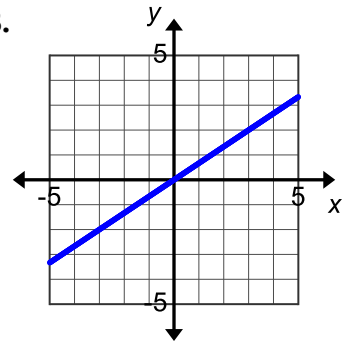
12.



$m =$ _____ $b =$ _____

_____

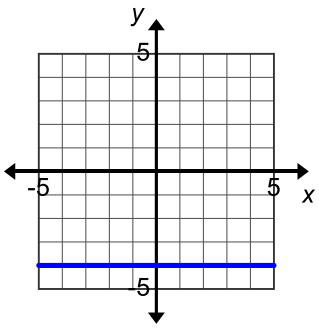
13.



$m =$ _____ $b =$ _____

_____

14.



$m =$ _____ $b =$ _____

_____

Convert each equation to slope-intercept form.

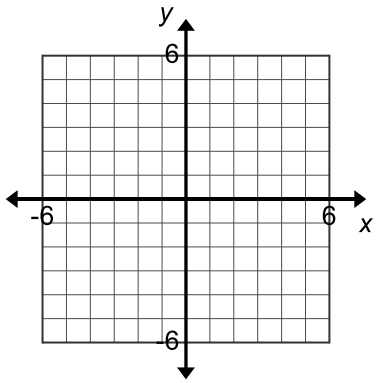
15. $4x + 5y = -20$

16. $-6x + y = 0$

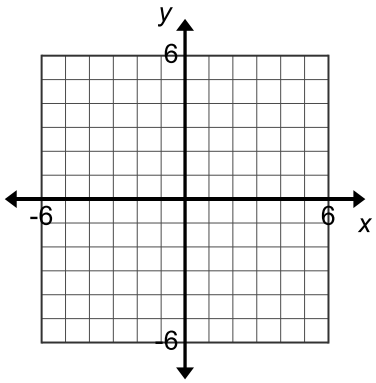
17. $-12x + 3y = 18$

Graph using any method.

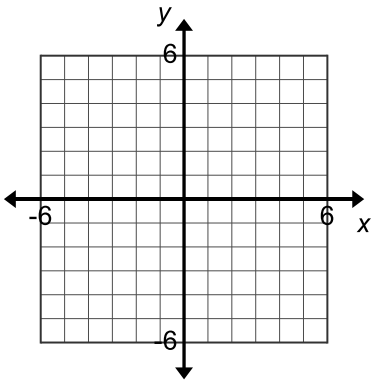
18. $y = -4x + 2$



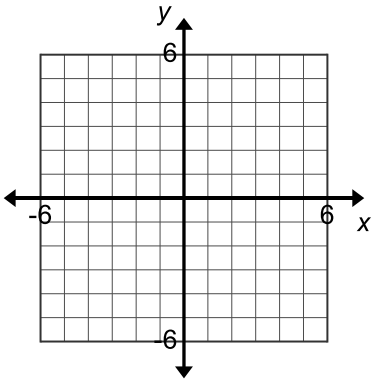
19. $y = -\frac{3}{2}x - 4$



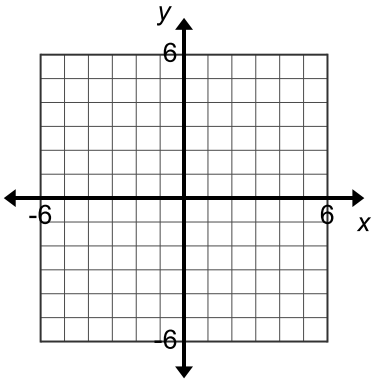
20. $y = -3$



21. $x = 1$

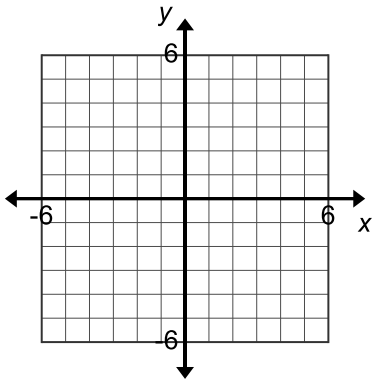


22. $4x - 6y = 12$

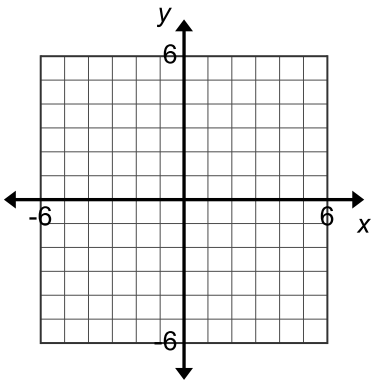


Graph using any method.

23. $y = 3x$



24. $y = x$



Write the equation of the line given the following information.

25. slope = 3 , point = (3 , 2)

26. slope = $\frac{1}{2}$, point = (-2 , 7)

27. slope = 0 , point = (4 , 8)

28. slope = $-\frac{3}{7}$, point = (-5 , -5)

29. two points: A (5 , 12) & B (25 , 52)

30. two points: A (-2 , 3) & B (-2 , 2)

Write an equation for each line given the table below. Hint: The y-intercept is already given.

31.

x	*y*
-3	12
0	14
3	16
6	18

***m* =** _____ ***b* =** _____

Equation: _____

32.

x	*y*
0	-2
1	-2
2	-2
3	-2
4	-2

***m* =** _____ ***b* =** _____

Equation: _____

33.

x	*y*
0	1
25	2
50	3
75	4

***m* =** _____ ***b* =** _____

Equation: _____

34.

x	*y*
-2	5
0	1
5	-9
6	-11

***m* =** _____ ***b* =** _____

Equation: _____

Write an equation for each line given the table below. Hint: the y-intercept is <u>not</u> already given.

35.

x	*y*
-5	-5
-4	-2
-3	1
-2	4

***m* =** _____ ***b* =** _____

Equation: _____

36.

x	5	10	30
y	7	8	12

***m* =** _____ ***b* =** _____

Equation: _____