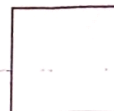


Name: _____

Unit 4: Linear Equations



Date: _____ Bell: _____

Homework 2: Slope-Intercept & Standard Form

**** This is a 2-page document! ****

Directions: Give the equation for each form below.

Slope-Intercept Form

Standard Form

Directions: Write the equation of the line with the given slope and y-intercept in slope-intercept form.

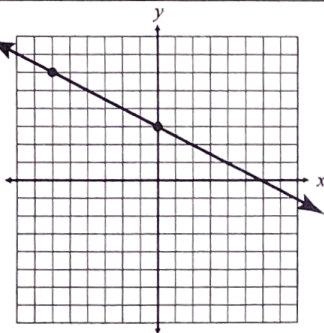
1. slope = $\frac{1}{3}$; y-intercept = -1

2. slope = $-\frac{2}{5}$; y-intercept = 0

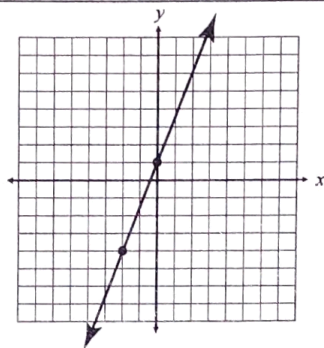
3. slope = 1; y-intercept = 8

Directions: Write the equation of the line shown on the graph in slope-intercept form.

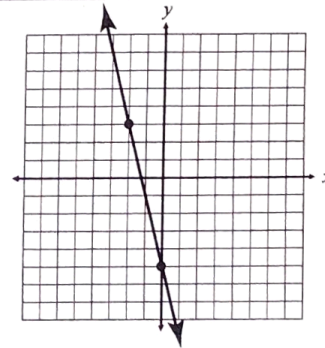
4.



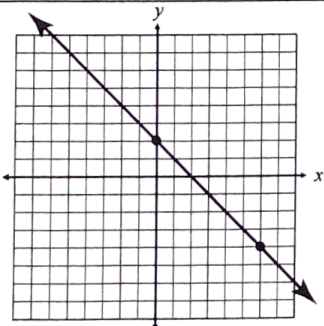
5.



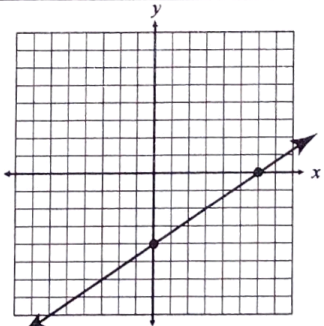
6.



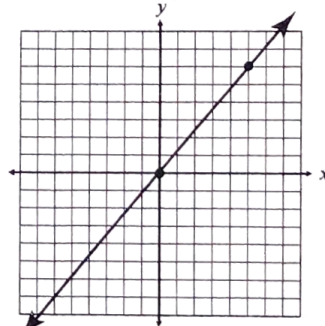
7.



8.



9.



Directions: Convert the following equations from standard form to slope-intercept form.

10. $6x + 2y = 10$

11. $x + 2y = 4$

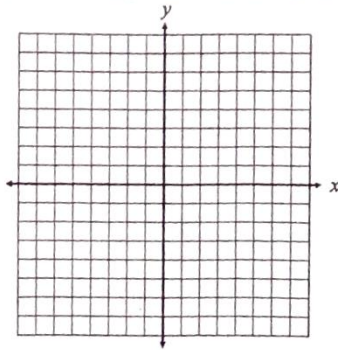
Identify the slope and y-intercept of the line, then graph the equation.

12.

$$y = x - 4$$

$$m = \underline{\hspace{2cm}}$$

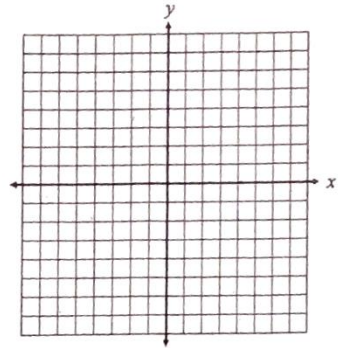
$$b = \underline{\hspace{2cm}}$$



13. $y = -\frac{1}{4}x + 3$

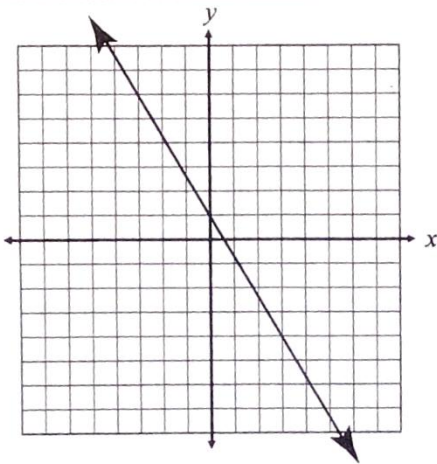
$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$



Directions: Determine the equation that best represents the line shown on the graph.

14.



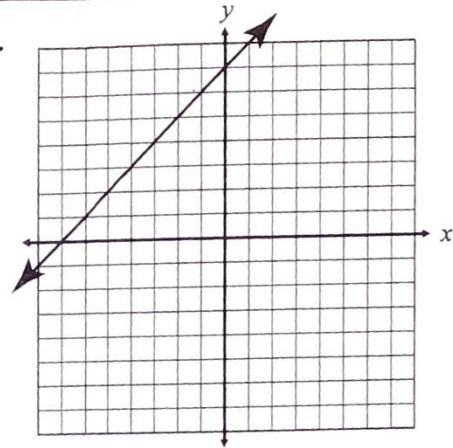
A. $-5x + 3y = 3$

C. $5x + 3y = 3$

B. $5x + 3y = -3$

D. $-5x - 3y = -3$

15.



A. $x - y = -7$

C. $x - y = 7$

B. $x + y = -7$

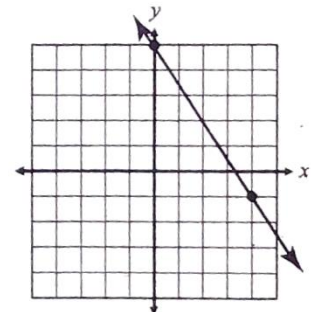
D. $x + y = 7$

16. Write the equation of the line shown on the graph.

$$m =$$

$$b =$$

Equation: _____



Choose the equation that best fits the line shown on the graph.

A. $y = 2x + 1$

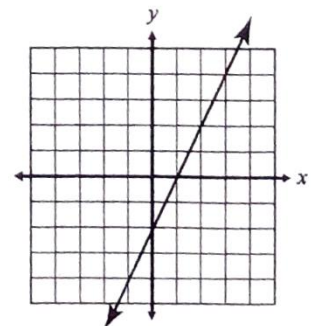
B. $y = -2x + 1$

C. $y = 2x - 2$

D. $y = -2x - 2$

$$m =$$

$$b =$$



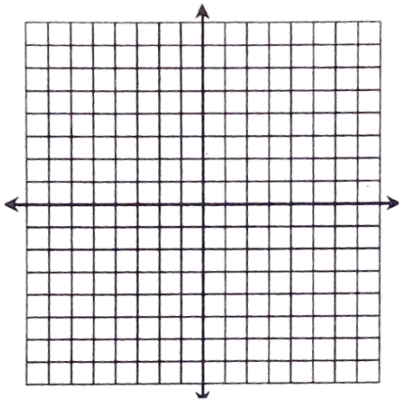
17. $x + y = -3$

18. $-2x + 3y = -6$

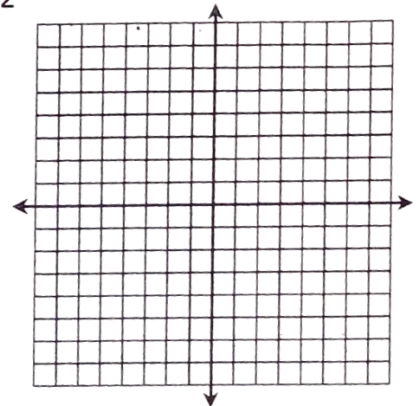
19. $4x + y = -1$

20. $5x - 2y = 14$

21. $10x - 8y = 24$



22. $9x + 12y = 12$



QUESTIONS

23. What is the slope of the line $y = 4$?

24. What is the slope of the line $x = -2$?

25. What is the slope of the line $x = 0$?

26. Which axis is $y = -1$ parallel to?

27. Which axis is $x = 4$ parallel to?

BONUS

28. How does the graph of $y = 3$ differ from $y = 3x$? Graph both and explain.

