Name _____ **Date** _____

Assignment 24 LESSON 3.5

Write an equation of the line with the given slope m and *y*-intercept *b*. Show All Work

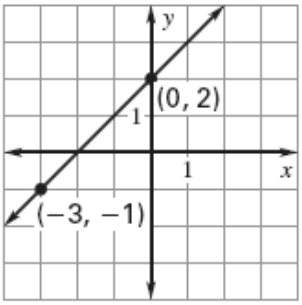
1. $m = 2$; $b = 3$

2. $m = 1$; $b = 1$

3. $m = -6$; $b = 4$

4. $m = \frac{1}{2}$; $b = -5$

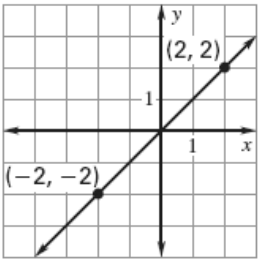
5. Multiple Choice Which equation is an equation of the line in the graph?



A. $y = 2x + 2$
B. $y = x + 2$
C. $y = -2x + 2$
D. $y = -x + 2$

Write an equation of the line shown.

6.



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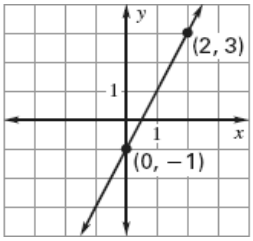

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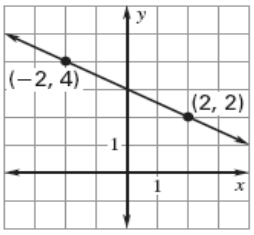

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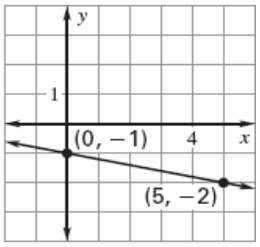


Write an equation of the line that passes through the given point *P* and has the given slope *m*.

10. $P(0, 2)$; $m = 3$

11. $P(2, 4)$; $m = \frac{1}{2}$

Write an equation of the line that passes through point *P* and is parallel to the line with the given equation.

12. $P(2, 5)$; $y = 4x + 1$

13. $P(0, 1)$; $y = -x + 3$

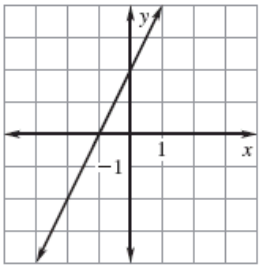
Write an equation of the line that passes through point *P* and is perpendicular to the line with the given equation.

14. $P(4,2)$; $y = \frac{1}{2}x + 4$

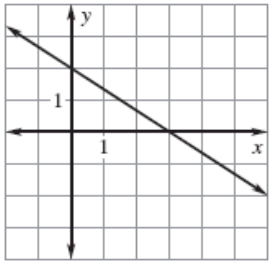
15. $P(-2,6)$; $y = 2$

Identify the *x*- and *y*-intercepts of the line. Use the intercepts to write an equation of the line.

16.

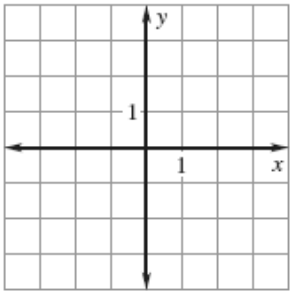


17.

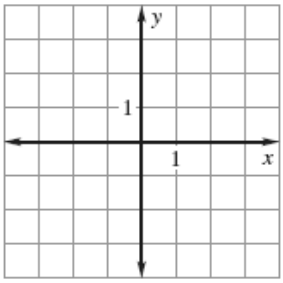


Graph the equation.

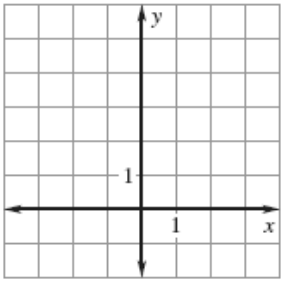
18. $-x + y = 1$



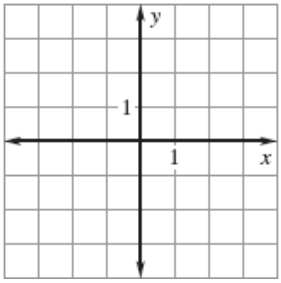
19. $3x + y = 2$



20. $4x + 2y = 8$



21. $y - 4 = x - 1$



22. $2y + 1 = 3x + 5$