Graphing Linear Equations: Worksheet

Algebra · Worksheet for https://jugami.com/algebra/graphing-linear-equations/ · For instant feedback, try the self-guided quiz online.

Name _____ Date _____

Work each one on paper. Show your work, and use the grids for the problems that ask for a graph.

1. Which quadrant is (5, −3) in?

Answer: _____

2. Is (1, 3) a solution of 2x + 3y = 11?

Answer: _____

3. Find the slope through (−2, 1) and (2, 13).

Answer: _____

4. Find the slope through (3, −1) and (−3, 3).

Answer: _____

5. Find the slope through (−2, 1) and (−2, 6), and write the equation of the line.

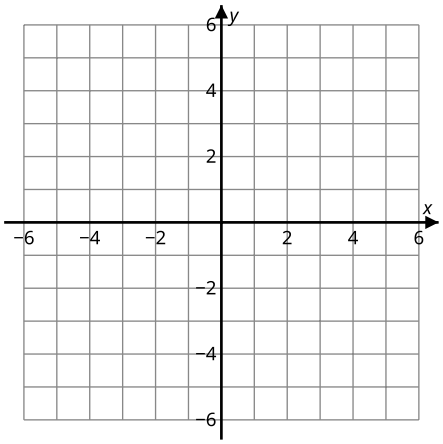
Answer: _____

6. Give the slope and y-intercept of y = 3x − 5.

Answer: _____

7. Write 4x + 2y = 6 in slope-intercept form and graph it.

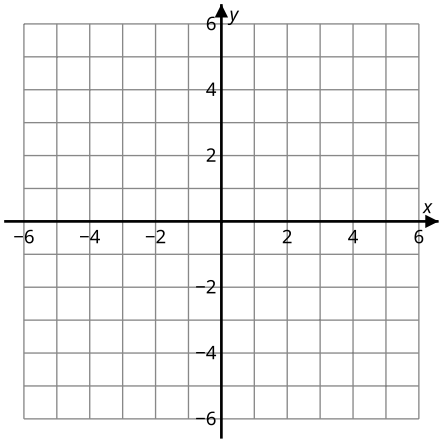
Use the grid.



Answer: _____

8. Find the intercepts of 5x + 2y = 10 and graph the line.

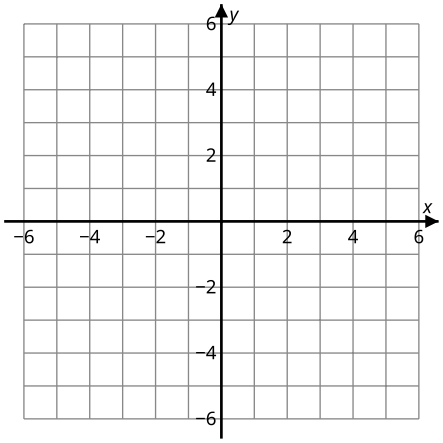
Use the grid.



Answer: _____

9. Write and graph the line with slope 2/3 and y-intercept −1.

Use the grid.



Answer: _____

10. Write the equation of the line with slope −3 through (2, 4).

Answer: _____

11. Write the equation of the line through (−2, −1) and (2, 7).

Answer: _____

12. Write the equation of the line perpendicular to y = −2x + 1 through (4, 5).

Answer: _____

13. A taxi ride of 3 miles costs $10, and a ride of 7 miles costs $18. Write a linear equation for the cost y of x miles, and say what the slope and y-intercept mean.

Answer: _____

Bonus

A little extra practice with the same skills.

14. Find the slope through (2, −3) and (6, 5).

Answer: _____

15. Find the intercepts of $2x - 3y = 12$.

Answer: _____

16. Write the equation of the line through (−4, 2) and (4, 6).

Answer: _____