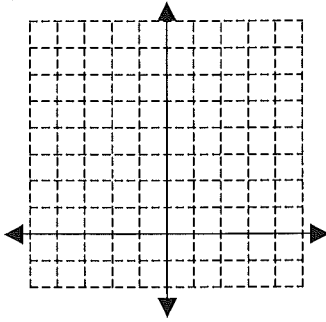


Algebra – Worksheet 3.13 – Writing an equation when given two points

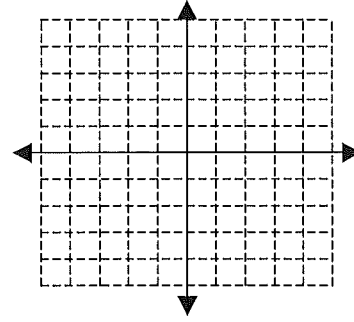
Name: _____ Date: _____ Period: _____

Graph the line that passes through the points. Then write the equation of the line in slope-intercept form.

1. $(1, 8)$ and $(-2, -1)$



2. $(-4, -1)$ and $(2, 2)$



Use the slope formula to find the slope of the line between the given points.

3. $(-4, 1)$ and $(2, -5)$

4. $(2, -3)$ and $(-3, 7)$

Write the equation in slope-intercept form for the line with the given slope that contains the given point.

5. slope = 1; $(-2, 3)$

6. slope = -3; $(-1, 6)$

Write the equation of the line in slope-intercept form that passes through the given points.

7. $(0, -5)$ and $(3, 4)$

8. $(2, 4)$ and $(1, -2)$

9. $(2, -2)$ and $(-4, 1)$

10. $(4, 3)$ and $(-8, 0)$

11. (9, -2) and (-3, 2)

12. (-3, -3) and (7, 2)

13. (1, 2) and (7, 2)

14. (5, -6) and (5, -3)

Review

15. Explain how to find the slope of the line if the equation is in standard form.

16. Explain how to find the x -intercept of the line if the equation is in standard form.

17. Explain how to write an equation of a line given the slope and one point on the line.

Solve for the variable in each of the following

18. $-4x + 3 = -5$

19. $\frac{y}{3} + 1 = 5$

20. $\frac{z+4}{3} = \frac{z-1}{2}$