Name _____ Class _____ Date_____

3-7 Practice   *Geometry*

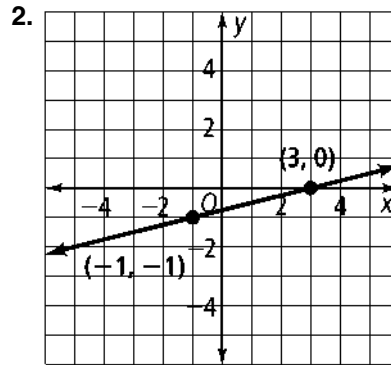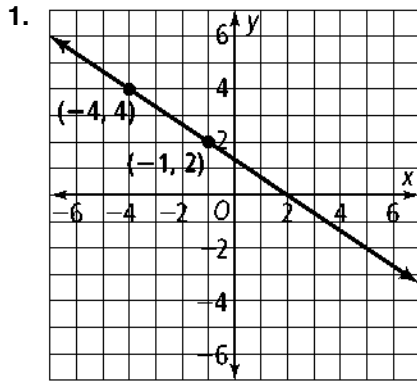**Practice**

Equations of Lines in the Coordinate Plane

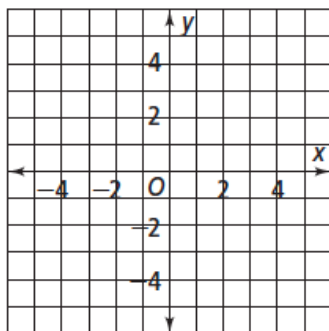**Find the slope of the line passing through the given points.**

1.

2.

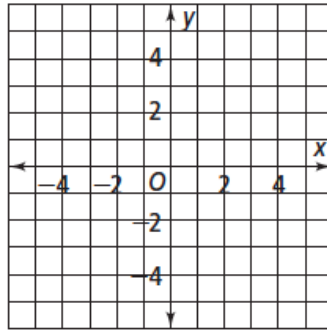**3.** $(2, 3), (-1, -6)$

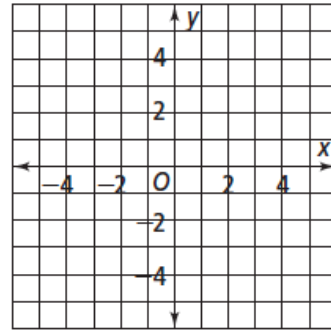**4.** $(2, 9), (4, -7)$

Graph each line.

5. $y = 3x - 4$

6. $y - 2 = (x + 3)$
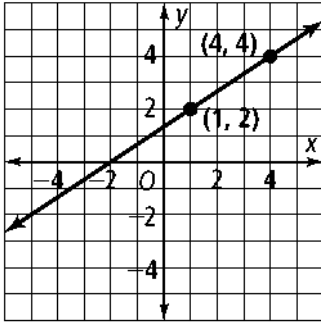
7. $y + 2 = -4(x + 3)$

Use the given information to write an equation for each line.
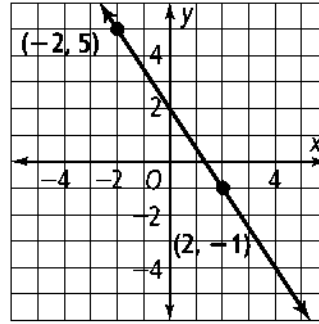
8. slope 6, y-intercept 4

9. slope $-\frac{1}{3}$, y-intercept -2
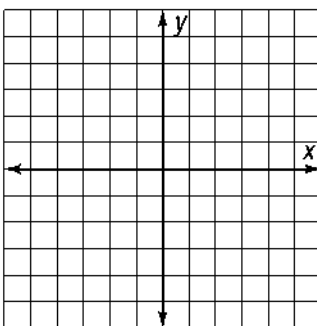
Use the given information to write an equation for each line.

10.

11.

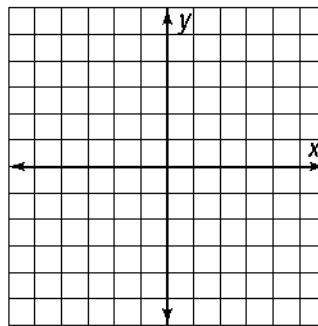**12.** through $(-2, 0)$ and $(3, 10)$

Graph each line.
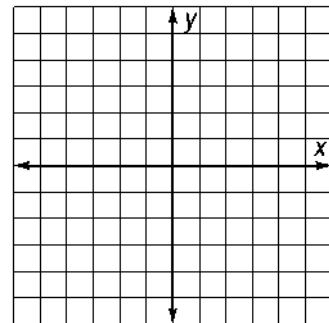
13. $y = -4$ **14.** $x = 3$ **15.** $y = 5$

16. Open-Ended Write equations for three lines that contain the point $(0, 2)$.

Write each equation in slope-intercept form.

17. $y - 3 = 4(x + 2)$

18. $y - 2 = -2(x - 5)$
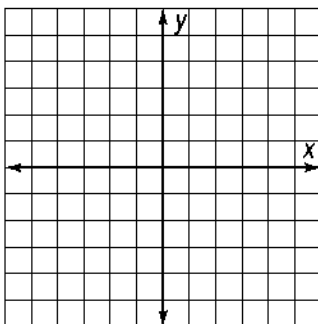
19. $y + 1 = \frac{1}{2}(x + 4)$

20. A wireless phone company charges $20 for a basic plan each month plus $0.25/min for each call.

   a. Write an equation to show how much the company charges, where x is the number of minutes used and y is the total cost.

   b. Find the total cost for 300 minutes, 350 minutes, and 400 minutes.

Graph each pair of lines. Then find their point of intersection.

21. $y = x$ $x = -2$

22. $y = 6$ $y = -x + 4$