

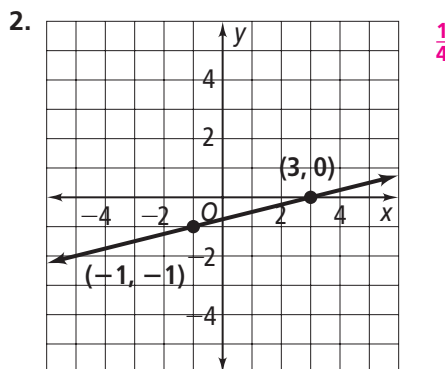
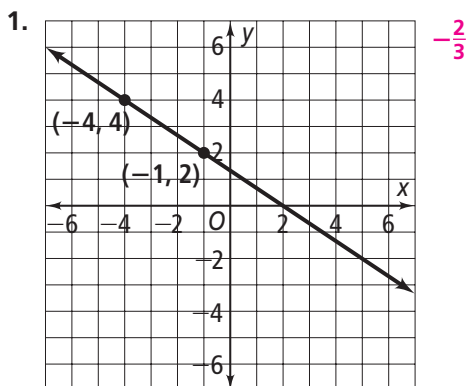
# 3-7

## Practice

Form G

### Equations of Lines in the Coordinate Plane

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



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

4.  $(-6, -2), (-3, -6)$   $-\frac{4}{3}$

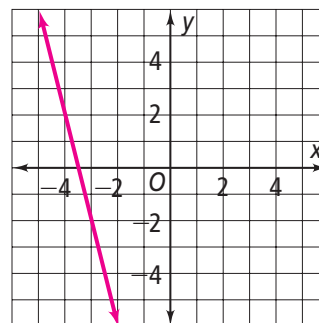
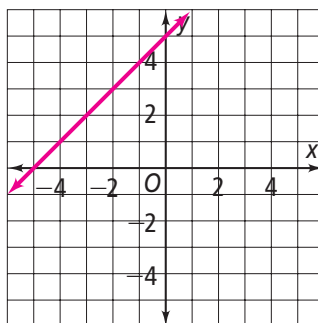
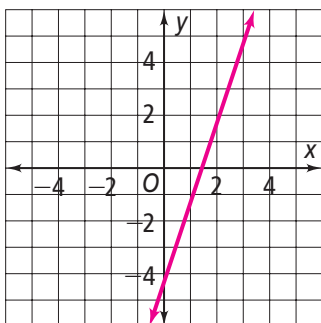
5.  $(2, 9), (4, -7)$   $-8$

Graph each line.

6.  $y = 3x - 4$

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

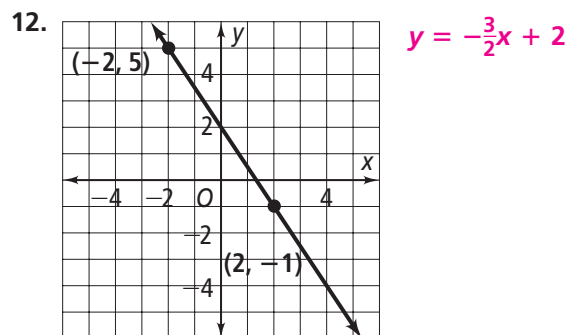
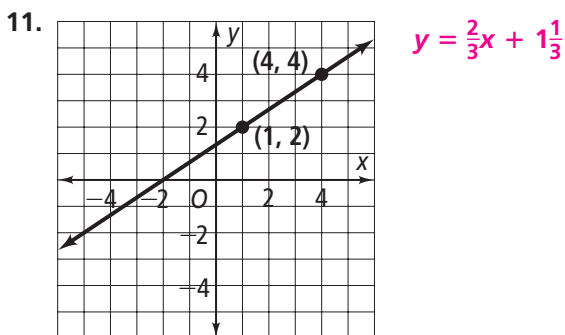
8.  $y + 2 = -4(x + 3)$



Use the given information to write an equation for each line.

9. slope 6, y-intercept 4  $y = 6x + 4$

10. slope  $-\frac{1}{3}$ , y-intercept  $-2$   $y = -\frac{1}{3}x - 2$



13. through  $(-2, 0)$  and  $(3, 10)$   
 $y = 2(x + 2)$

14. through  $(10, 2)$  and  $(2, -2)$   
 $y - 2 = \frac{1}{2}(x - 10)$

# 3-7

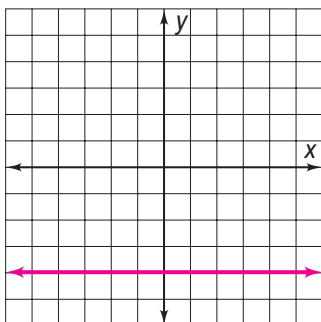
## Practice (continued)

Form G

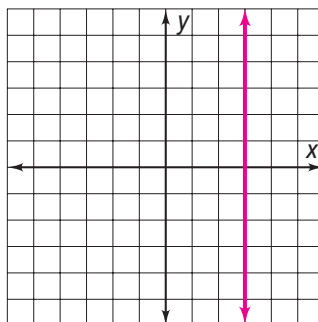
### Equations of Lines in the Coordinate Plane

Graph each line.

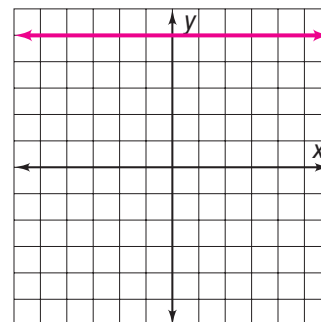
15.  $y = -4$



16.  $x = 3$



17.  $y = 5$



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

Answers may vary. Sample:  $y = 2$ ,  $y = x + 2$ ,  $y = -4x + 2$

Write each equation in slope-intercept form.

$y = 4x + 11$

$y = -2x + 12$

$y = -\frac{1}{2}x - 3$

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

20.  $y - 2 = -2(x - 5)$

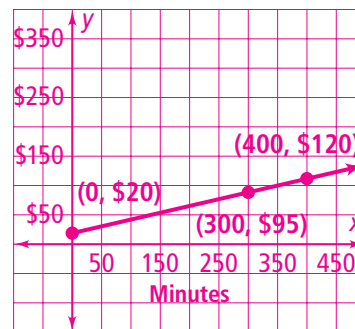
21.  $y + 1 = -\frac{1}{2}(x + 4)$

22. 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.  $y = 0.25x + 20$

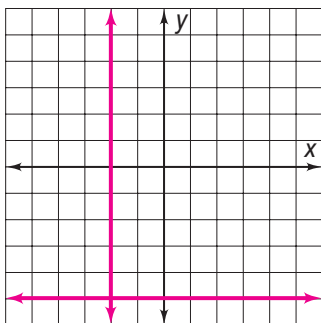
b. Find the total cost for 300 minutes, 350 minutes, and 400 minutes. **\$95; \$107.50; \$120**

c. Graph the equation using the values for 300 and 400 minutes.



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

23.  $y = -5$ ,  $x = -2$   **$(-2, -5)$**



24.  $y = 6$ ,  $x = -1$   **$(-1, 6)$**

