Name _____ Class _____ Date _____

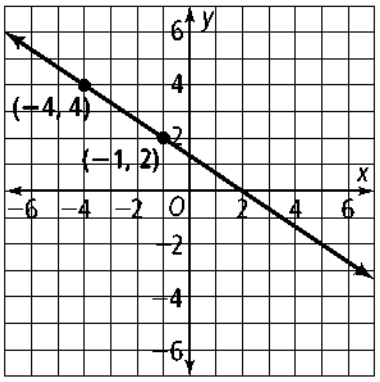
3-7 Practice

Form G

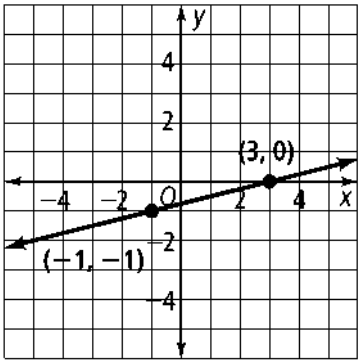
Equations of Lines in the Coordinate Plane

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

1.



2.



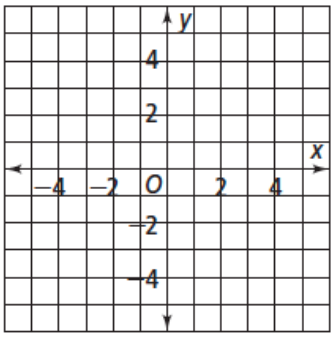
3. (2, 3), (−1, −6)

4. (−6, −2), (−3, −6)

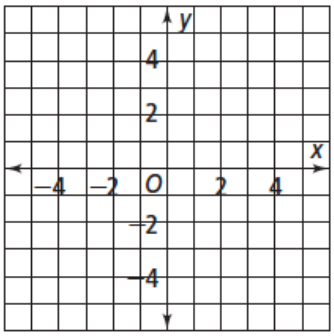
5. (2, 9), (4, −7)

Graph each line.

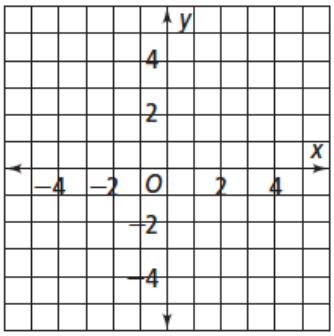
6. $y = 3x - 4$



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



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

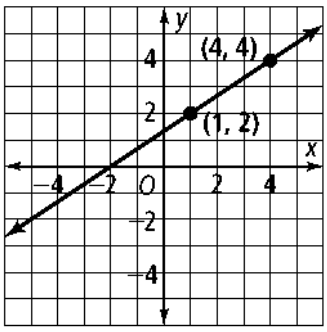


Use the given information to write an equation for each line.

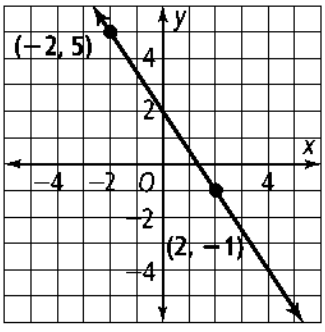
9. slope 6, y-intercept 4

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

11.



12.



13. through (−2, 0) and (3, 10)

14. through (10, 2) and (2, −2)

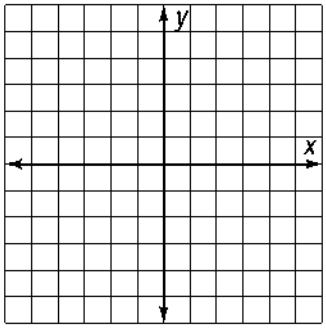
Name _____ Class _____ Date _____

3-7 Practice (continued) *Form G*

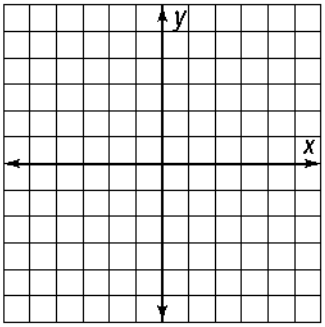
Equations of Lines in the Coordinate Plane

Graph each line.

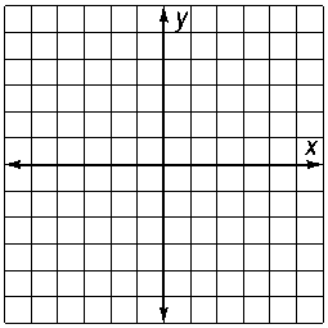
15. $y = -4$



16. $x = 3$



17. $y = 5$



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

Write each equation in slope-intercept form.

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.

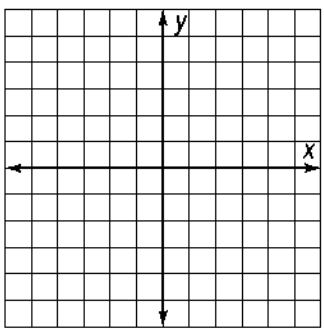
a. Write an equation to show how much the company charges, where x is the number of minutes used and y is the total cost.

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

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

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

23. $y = -5$, $x = -2$



24. $y = 6$, $x = -1$