

# 5-4 Practice

## Point-Slope Form

Form K

Write an equation in point-slope form of the line that passes through the given point and has the given slope.

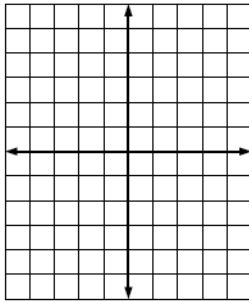
1.  $(1, 3); m = 5$

2.  $(-2, -1); m = -3$

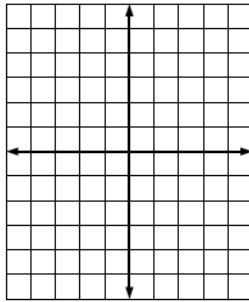
3.  $(4, -7); m = -\frac{1}{4}$

Graph each equation.

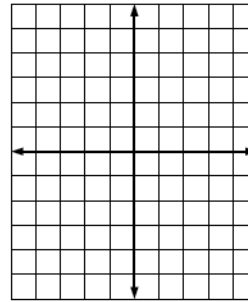
4.  $y + 1 = 3(x - 2)$



5.  $y - 4 = -1(x + 2)$

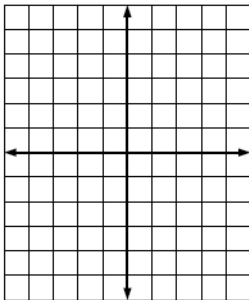


6.  $y - 3 = -2(x + 4)$

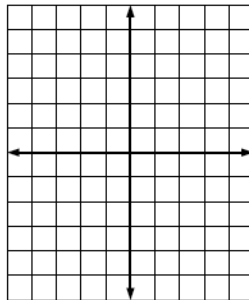


Graph the line that passes through the given point and has the given slope  $m$ .

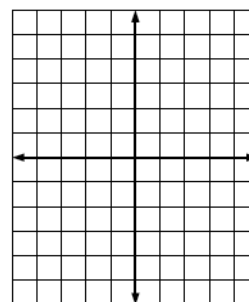
7.  $(-1, -3); m = 2$



8.  $(-3, -2); m = -4$



9.  $(-2, 6); m = -\frac{1}{2}$



10. Write an equation in each of the following forms that has a slope of  $-\frac{2}{3}$
- a. point-slope form
  - b. slope-intercept form

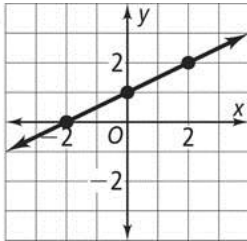
# 5-4 Practice (continued)

## Point-Slope Form

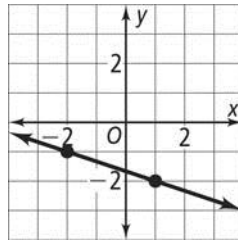
Form

Write an equation in point-slope form of each line.

11.



12.



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

13.  $(5, 1), (0, 2)$

14.  $(-2, -3), (4, 3)$

15.  $(-3, -2), (2, 3)$

16.  $(2, 5), (8, -7)$

17. A restaurant's goal is to serve 600 customers in 8 hours and 900 customers in 12 hours. Write an equation in point-slope form that represents the number of customers served per hour. What is the graph of the equation?