

Name \_\_\_\_\_ Class \_\_\_\_\_ Date. \_\_\_\_\_

## Practice 5-4

### Point-Slope Form and Writing Linear Equations

Write an equation in point-slope form for the line through the given points or through the given point with the given slope.

1.  $(5,7), (6,8)$       2.  $(-2,3); m = -1$       3.  $(1,2), (3,8)$       4.  $(-2,3); m = 4$

5.  $(4,7); m = \frac{3}{2}$       6.  $(6,-2); m = -\frac{4}{3}$       7.  $(0,5), (-3,2)$       8.  $(8,11), (6,16)$

9.  $(4,2), (-4,-2)$       10.  $(15,16), (13,10)$       11.  $(0, -7); m = -4$       12.  $(-3,4), (1,6)$

13.  $(1,2); m \text{ undefined}$       14.  $(-6,7); m = -\frac{1}{2}$       15.  $(21,-2), (27,2)$       16.  $(7,5); m = 0$

Write the equation of the line through the given points in slope-intercept form. Then rewrite the equation in standard form.

17.  $(8,-2), (14,1)$       18.  $(4,8), (2,12)$       19.  $(-5,13), (-10,9)$       20.  $(6,2), (-1,7)$

21.  $(5,-3), (-2,0)$       22.  $(0,7), (-5,12)$       23.  $(-6,2), (0,5)$       24.  $(100,90), (80,120)$

Write an equation for each line in point-slope form. Then rewrite the equation in slope-intercept form.

