Practice 6-4

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.

2.
$$(-2,3); m = -1$$
 3. $(1,2), (3,8)$ **4.** $(-2,3); m = 4$

4.
$$(-2,3)$$
; $m=6$

5.
$$(4,7)$$
; $m=\frac{3}{2}$

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

7.
$$(0,5), (-3,2)$$

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

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

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

19.
$$(-5, 13), (-10, 9)$$
 20. $(6, 2); m = \frac{3}{4}$

22.
$$(4, 3.5); m = 0.5$$

23.
$$(-6,2)$$
; $m=\frac{5}{2}$

27.
$$(2,7); m = \frac{5}{2}$$

21.
$$(5, -3); m = -2$$
 22. $(4, 3.5); m = 0.5$ **23.** $(-6, 2); m = \frac{5}{3}$ **24.** $(100, 90), (80, 120)$ **25.** $(-3, 6), (3, -6)$ **26.** $(11, 7), (9, 3)$ **27.** $(2, 7); m = \frac{5}{2}$ **28.** $(-9, 8); m = -\frac{5}{3}$

Is the relationship shown by the data linear? If it is, model the data with an equation.

29.

У
3
7
11
15

30.

х	у
-3	4
-1	6
1	7
3	10

31.

Х	У
-4	12
-1	8
5	-4
10	-8

32.

X	У
-2	5
3	-5
7	-13
11	-21

33.

Х	У
-6	-5
-2	1
0	4
8	16

34.

Х	У
-6	11
-3	9
6	3
15	-3

35.

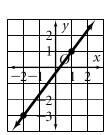
Х	У
-7	-3
-5	0
-1	3
3	7

36.

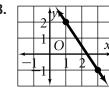
Х	У
-4	1
2	4
6	6
14	10

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

37.



38.



39.

