Name_____Class_____Date_____

Practice 6-5 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 undefined

14. (–6, 7); $m = -\frac{1}{2}$

15. (21, –2), (27, 2)

16. (7, 5); $m = 0$

17. (8, –2), (14, 1)

18. (4, 8), (2, 12)

19. (–5, 13), (–10, 9)

20. (6, 2); $m = \frac{3}{4}$

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.

x	y
2	3
3	7
4	11
5	15

30.

x	y
−3	4
−1	6
1	7
3	10

31.

x	y
−4	12
−1	8
5	−4
10	−8

32.

x	y
−2	5
3	−5
7	−13
11	−21

33.

x	y
−6	−5
−2	1
0	4
8	16

34.

x	y
−6	11
−3	9
6	3
15	−3

35.

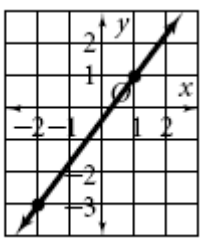
x	y
−7	−3
−5	0
−1	3
3	7

36.

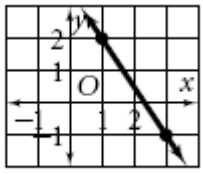
x	y
−4	1
2	4
6	6
14	10

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

37.



38.



39.