

Practice 5-5

Example Exercises

Example 1

Write the equation of a line through the given point with the given slope.

1. $(1, 4); m = 3$ 2. $(-3, 1); m = -2$ 3. $(-3, 2); m = 0$ 4. $(5, -3); m = 5$
 5. $(2, 0); m = \frac{3}{4}$ 6. $(3, -5); m = -\frac{4}{3}$ 7. $(9, -5); m = -1$ 8. $(0, 6); m$ undefined
 9. $(6, -6); m = -\frac{7}{3}$ 10. $(7, 9); m = \frac{1}{2}$ 11. $(1.5, 9.5); m = 0.5$ 12. $(12, -7); m = \frac{5}{2}$

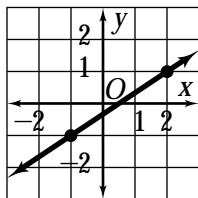
Example 2

Write an equation of a line through the given points.

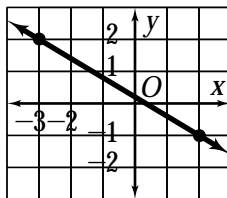
13. $(2, 4), (5, 7)$ 14. $(-1, 1), (2, 7)$ 15. $(0, 4), (-2, -2)$ 16. $(12, 18), (15, 12)$
 17. $(-8, 7), (8, 15)$ 18. $(50, 85), (60, 80)$ 19. $(12, 9), (9, 17)$ 20. $(0.5, 4), (3, 3.5)$
 21. $(0, -5), (3, -2)$ 22. $(-15, 9), (-10, 4)$ 23. $(12, -4), (16, 1)$ 24. $(6, 11), (3, 13)$

Write an equation of each line.

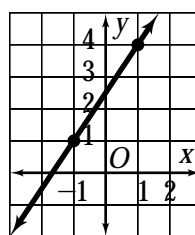
25.



26.



27.



Example 3

Tell whether the relationship between the x - and y -values is linear. If it is, write an equation for the relationship between the values.

28.

x	y
-4	-4
0	4
2	8
6	16

29.

x	y
-3	3
6	6
12	8
21	11

30.

x	y
5	11
8	16
12	25
17	37

31.

x	y
-3	-13
-1	-5
0	-1
3	11