

In Exercises 13–36, solve the equation. Check your result.

13. $4x + 27 = 3x$ -27

14. $8y + 14 = 6y$ -7

15. $-2m = 16m - 9$ $\frac{1}{2}$

16. $7n = -35n - 6$ $-\frac{1}{7}$

17. $12c - 4 = 4c$ $\frac{1}{2}$

18. $-25d + 10 = 15d$ $\frac{1}{4}$

19. $5r + 6 = -14r - 13$ -1

20. $7s - 8 = 10s + 1$ -3

21. $12p - 7 = -3p + 8$ 1

22. $-6q + 8 = 4q - 12$ 2

23. $-7 + 4m = 6m - 5$ -1

24. $-9 + 13g = 11 - g$

25. $8 - 9t = 21t - 17$ $\frac{5}{6}$

26. $20 + 8r = -4 + 5r$ -8

27. $6(3 - x) = 3x$ 2

28. $-2(x - 5) = -x$ 10

29. $(-4 + y)10 = 2y$ 5

30. $(-6a - 2)4 = 16a$ $-\frac{1}{5}$

31. $9(b - 4) = 5(3b - 2)$

32. $-4(3 - n) = 11(4n - 3)$ $\frac{21}{40}$

33. $\frac{1}{2}(8n - 2) = 16 - 30n$ $\frac{1}{2}$

34. $\frac{1}{3}(42 - 18z) = 2(8 - 4z)$ 1

35. $\frac{1}{4}(100 + 36s) = 15 - 4s$ $-\frac{10}{13}$

36. $\frac{2}{3}(24t - 9) = 8t + 23$

- ★ 37. **Bike Safety** Suppose you live near a park that has a bike trail you like to ride. The Park Department rents a bike with safety equipment for \$5 a day. If you provide your own safety equipment, the bike rental is \$3 a day. You could buy the equipment at a sports store for \$28. How many times must you use the trail to justify buying your own safety equipment? **15 or more**

24. $1\frac{3}{7}$ or $\frac{10}{7}$

31. $-4\frac{1}{3}$ or $-\frac{13}{3}$

36. $3\frac{5}{8}$ or $\frac{29}{8}$

break even point

$5d = 3d + 28$

$d = 14$

$d = \# \text{ days}$