

Solve the equation and check that your solution satisfies the original equation.

1. $2x + 3 = 0$

2. $2 - 5x = 0$

3. $3 + 7x = 8$

4. $2 - 9x = 11$

5. $13 - 2(x + 4) = 6$

6. $3x + 12(x - 3) = 10$

7. $\frac{7}{5}x - 3 = \frac{2}{5}x$

8. $8x - (3 + 2x) = 3x + 1$

9. $7 - 2(x + 4) = 2 - x$

10. $3 + 4(2 - 3x) = 3 - 4x$

11. $9 + 2(4 - 5x) + x = 2 - 3\left(6 + \frac{2}{3}x\right)$

Solve for x, y, and/or z.

12. $4(2x - 3) - 12x = 0$

13. $15x - 3(x + 6) = 7$

14. $6(x - 2) - x = 9x + 53$

15. $ax - bx + c = d$

16. $7 - (x + 4) - 2x = 9$

17. $\frac{1}{2}x - \frac{3}{4}\left(x - \frac{1}{2}\right) = \frac{1}{8}$

18. $\frac{3x - 5}{7} + \frac{8 - 2x}{3} = 2$

19. $\frac{3}{2}x + 7 = \frac{2}{3}$

20. $-\frac{3}{4}(2 - x) + \frac{2}{3}x = 3$

21. $3y - 7(1.2y + 4) = 2$

22. $2z - 3(2 - z) + 7 = 2 - z$

23. $3 - \frac{2}{5}y = 3 + \frac{1}{4}\left(3 - \frac{1}{5}y\right)$

24. $2z + 5 - \frac{3}{5}z = 3(2 - z)$

25. $a = bx + 6, a \neq 0, b \neq 0$

26. $\frac{3}{5}y - a + my - 3 = cy$

27. $1.2x - 3(2 - .3x) = 3 - 2(3x - 2) + 7$

28. $5\left[3 - \frac{1}{2}(2z - 4) + z\right] = 3 - 2\left(\frac{1}{3}z + 4\right) - z$

29. $-1.2z - 3 + 2(3.8 - 1.1z) = 11$

30. $az + by + cx - d = ex - y$