

1. $2x + 5 = 3x + 2$
2. $5x + 5 = 25 - 5x$
3. $x + 1 = 2x + 20$
4. $3x - 3 = x - 4$
5. $3 \cdot (x - 2) = 5 \cdot (x - 4)$
6. $2 \cdot (3x + 1) - (x - 4) = 4x$
7. $2x - (3 - 3x) = 12$
8. $(5x - 2(x - 2)) = 4$
9. $x \cdot (x + 2) = x^2 - 8$
10. $(3x - 4) \cdot 5 = 10x + 5$
11. $(-2x + 3) \cdot (-2) = 2x - 2$
12. $(-5x - 2) \cdot (-2) - 5 = 8x + 5$
13. $12x - 5 = -3x - (6x - 2)$
14. $2(3x - 7) - 5(4x - 12) = 6(5 - 2x)$
15. $(2x - 5) \cdot (x + 3) + 2x = (x - 2) \cdot (2x - 3) + 5$
16. $(5x - 5) \cdot (2x - 2) + 11x = (2x - 3) \cdot (5x + 4)$
17. $(2x - 1) \cdot (2x + 1) = (4x + 3) \cdot (x - 7) - 30$
18. $(x + 5) \cdot (x - 4) - (2x + 2) \cdot (x - 5) = (3 - x) \cdot (x + 3) + 8$
19. $(2x - 4)(3x + 5) - (5x - 5)(x - 1) = (x - 2)(x + 3) - 33$
20. $(2x - 2)(x + 3) - (x + 5)(2x - 4) = (3x - 1)(x + 1) - (2 - x)(2 - 3x) + 3$
21. $(2x + 2)(3x - 5) + (x - 2)(2x + 3) + 1 = (2x - 2)(2x - 2) + (4x - 1)(x + 5) - 20x$
22. $(3x - 3)(5x + 5) - (2x - 4)(3x + 2) - (3x + 1)(2x - 7) = (x + 1)(3x - 2) - 76$
23. $(5x - 5)(3x + 1) + 3x - (x + 2)(3x - 5) + 17 - (4x - 2)(3x + 1) = 0$
24. $-8 = (x - 15)(x + 15) - (2 - x)(x + 3) - (2x - 1)(x + 3)$
25. $(x - 2)(x + 2) - (x - 3)(x + 3) = (x + 9)(x - 9) - (x + 8)(x - 7)$
26. $(2x + 3)(x - 5) - (x - 1)(x + 2) - 25 - (x - 4)(x + 5) = 0$
27. $2(x - 2)(x + 3) - 3(x + 4)(x - 1) + (x - 1)(x + 1) = 20$
28. $-3(x + 1)(x - 4) - 2(x + 4)x + 5(x - 7)(x + 3) + 93 = 2x$
29. $(2x - 1)^2 - (3x - 4)^2 + (5x - 2)(x + 2) + 65 = 5x$
30. $2(2x - 1)(x + 9) - (x + 2)(4x - 2) + 10x = 5$
31. $(2x - 1)(x + 2) \cdot 3 - (x - 2) \cdot (-3)(2x + 1) + 4(x + 4)(3 - 3x) = -10x - 16$
32. $3(x - 2)^2 - 2(x - 3)^2 = (x - 2) \cdot x$
33. $5(2x - 5)^2 - 3 \cdot (3x - 6)^2 - 3x + 7 \cdot (x - 1)^2 = 6$
34. $(5x - 3)^2 - (4x - 2)^2 - (3x + 2)^2 - 60 = 4x + 1$
35. $(10 - 13x)^2 - (5x + 8)^2 - (-12x - 6)^2 = 3x$
36. $3 \cdot (2x - 4)(2x + 4) - 12(x + 5)(x - 5) = 30$
37. $8(5x - 2)^2 - 3(10x - 1)^2 = 20 + 5x - 4(3 - 5x)^2$
38. $2 \cdot (2x - 1 - (x + 2)) - 3 \cdot ((5 - 2x) - (6 - 4x)) = (x - (2x + 3)) \cdot 2 + 5$
39. $1 - (2 - (7x - 4)) - ((2 - x) \cdot (3 + x) + 2) - 3 - (5 - (x + 2)(x + 3)) = 72$
40. $2(x - 3 - (2x - 3)) - ((x + 1) - 2(2x - (x - 5))) = 9x + 9$
41. $5 + (((1 - x) - 2x + 12) - 3x - 1) - (2x - (1 - (-3x - 2)) + 5) = 50$
42. $-(-x - (-3x - (-2 - 5x) - 2) - 7) \cdot 3 - 5 \cdot (12 - (3 - 3x) - 4x) + 2x = -24$
43. $x - (2x - (-3 - (-2x - (4 - 5x)))) = 45$

Lösungen

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|------------------------|-----------------------|---------------------------|-----------------------|
| 1. $x = 3$ | 2. $x = 2$ | 3. $x = -19$ | 4. $x = -\frac{1}{2}$ |
| 5. $x = 7$ | 6. $x = -6$ | 7. $x = 3$ | 8. $x = 0$ |
| 9. $x = -4$ | 10. $x = 5$ | 11. $x = 2$ | 12. $x = 3$ |
| 13. $x = \frac{1}{3}$ | 14. $x = 8$ | 15. $x = 2,6$ | 16. $x = 11$ |
| 17. $x = -2$ | 18. $x = 3$ | 19. $x = -2$ | 20. $x = \frac{4}{3}$ |
| 21. $x = \frac{2}{2}$ | 22. $x = -3$ | 23. $x = 4$ | 24. $x = -55$ |
| 25. $x = -30$ | 26. $x = -2$ | 27. $x = -3$ | 28. $x = 0$ |
| 29. $x = -2$ | 30. $x = \frac{1}{2}$ | 31. $x = \frac{26}{23} 2$ | 32. $x = 3$ |
| 33. $x = 2$ | 34. $x = -2$ | 35. $x = 0$ | 36. keine Lösung |
| 37. $x = +\frac{1}{5}$ | 38. $x = -1$ | 39. $x = 3$ <i>quadr.</i> | 40. $x = 0$ |
| 41. $x = -7$ | 42. $x = 50$ | 43. $x = -11$ | |