

Quadratics Review

Solve for x in each of the quadratic equations below. You MUST use each of the 4 methods at least 4 times each. All work must be done on another piece of paper.

ANSWERS

1. $9x^2 + 60x = -100$

2. $3x^2 + 5x = 12$

3. $5x^2 = 405$

4. $4x^2 = 64$

5. $-8x = 4x^2 - 1$

6. $x^2 + 2x - 35 = 0$

7. $\frac{1}{3}x^2 + 1 = 33$

8. $x^2 + 2x - 5 = 0$

9. $x^2 = -4x + 13$

10. $(6x - 4)^2 = 40$

11. $2x^2 + x = 3$

12. $4 + 2x^2 = 12$

13. $2x^2 - 2 = x$

14. $2x^2 + 5 = 7$

15. $x^2 + 5x = 6$

16. $-x^2 + 4 = 2x^2 - 5$

17. $x^2 + 2x - 24 = 0$

18. $x^2 - 4x - 2 = 0$

19. $-8x^2 + 96x = -32$

20. $7x^2 + 28x + 21 = 0$

21. $3x^2 + 4x - 4 = 0$

22. $2x^2 - 12x + 15 = 0$

23. $x^2 + 2x - 1 = 0$

24. $3x^2 + x - 1 = 0$

25. $x^2 + 2x - 15 = 0$

[1] $x = -\frac{10}{3}$

[2] -3, 4/3

[3] 9, -9

[4] 4, -4

[5] $\frac{-2 \pm \sqrt{5}}{2}$

[6] 5, -7

[7] $\pm 4\sqrt{6}$

[8] $x = -1 \pm \sqrt{6}$

[9] $x = -2 \pm \sqrt{17}$

[10] $\frac{2 \pm \sqrt{10}}{3}$

[11] $1, -\frac{3}{2}$

[12] ± 2

[13] $\frac{1 \pm \sqrt{17}}{4}$

[14] ± 1

[15] -6, 1

[16] $x = \pm\sqrt{3}$

[17] -6, 4

[18] $x = 2 \pm \sqrt{6}$

[19] $6 \pm 2\sqrt{10}$

[20] -1 and -3

[21] -2, 2/3

[22] $\frac{6 \pm \sqrt{6}}{2}$

[23] $-1 \pm \sqrt{2}$

[24] $\frac{-1 \pm \sqrt{13}}{6}$

[25] -5, 3