

1. Solve: $x^2 + 2x - 8 = 0$
2. Solve: $x^2 + 8x + 15 = 0$
3. Solve: $2x^2 - x = -1$
4. Solve: $3x^2 - 11x = -10$
5. Solve: $5x^2 + 2x = 6$
6. Solve: $y^2 - 18y = -81$
7. Solve: $4w^2 + 6w + 1$
8. Solve: $\frac{x^2}{2} + \frac{5}{2}x = -1$
9. Solve: $x(2x - 3) = 20$
10. Solve: $\frac{2x}{x+1} - \frac{3x}{x+2} = -3$
11. Solve: $\frac{3x}{x-1} - \frac{x}{x+2} = 5$
12. Solve: $x(x - 3) = -10$
13. Solve: $(x + 1)(x + 3) = 2x^2 + 3x$
14. Solve: $(2x - 5)(x + 1) = 2$
15. Solve: $\frac{x^2}{3} - x - \frac{1}{6} = 0$
16. Solve: $x^{2/3} + 4x^{1/3} - 5 = 0$
17. Solve: $x^4 - 17x^2 + 16 = 0$
18. Solve: $4x^{-4} + 1 = 5x^{-2}$
19. Solve: $\sqrt{3w + 4} + 2w = 12$
20. Solve: $\sqrt{t + 3} + \sqrt{2t + 7} = 1$
21. For the given function, determine the vertex, axis of symmetry, x -intercepts, y -intercept, and sketch the graph: $f(x) = 2(x - 3)^2 + 1$
22. For the given function, determine the vertex, axis of symmetry, x -intercepts, y -intercept, and sketch the graph: $f(x) = -2(x + 1)^2 + 5$
23. For the given function, determine the vertex, axis of symmetry, x -intercepts, y -intercept, and sketch the graph: $f(x) = (x - 4)^2 - 1$
24. For the given function, determine the vertex, axis of symmetry, x -intercepts, y -intercept, and sketch the graph: $f(x) = 4 - (x - 3)^2$
25. For the given function, determine the vertex, axis of symmetry, x -intercepts, y -intercept, and sketch the graph: $f(x) = x^2 + 2x - 3$
26. For the given function, determine the vertex, axis of symmetry, x -intercepts, y -intercept, and sketch the graph: $f(x) = x^2 - 2x - 15$
27. For the given function, determine the vertex, axis of symmetry, x -intercepts, y -intercept, and sketch the graph: $f(x) = 2x^2 - 7x - 4$