

Quadratic Equations

Zero Product Property – already factored

Procedure: 1. Set each factor equal to zero
2. Solve the resulting equations

Example: Solve for x. $(x - 2)(x + 5)(2x - 7) = 0$

$$\begin{aligned} 1. \quad x - 2 &= 0 \\ x &= 2 \end{aligned}$$

$$\begin{aligned} x + 5 &= 0 \\ x &= -5 \end{aligned}$$

$$\begin{aligned} 2x - 7 &= 0 \\ 2x &= 7 \\ x &= 7/2 \end{aligned}$$

Solve each equation.

1. $(x - 3)(x - 2) = 0$

2. $(a + 4)(a + 7) = 0$

3. $(y - 11)(y + 5) = 0$

4. $(x - 13)(x + 7) = 0$

5. $(n + 13)(n - 27) = 0$

6. $(x - 13)(x + 7) = 0$

7. $n(n + 12)(n - 8) = 0$

8. $(x + 11)(x - 10) = 0$

9. $(2x - 3)(2x + 7) = 0$

10. $x(x - 12)(5x - 13) = 0$

11. $(5n - 16)(n + 11) = 0$

12. $(y - 4)(5y + 8) = 0$

$$13. t(4t - 5)(t + 8) = 0$$

$$14. (2b - 7)(2b + 13) = 0$$

$$15. y(3y - 1)(y + 6) = 0$$