

# Solving: Quadratic Equations by Factoring $ax^2 + bx + c = 0$

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Solve the equation.

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

7.  $10x^2 - 19x + 6 = 0$

2.  $3x^2 - 6x = 24$

8.  $p^2 - 5p - 17 = 7$

3.  $2m^2 + 17m + 30 = 0$

9.  $x^2 - 8x + 16 = 0$

4.  $y^2 - 5y - 27 = 9$

10.  $x^2 - 9x = 36$

5.  $6x^2 - 5x + 1 = 0$

11.  $2x^2 + 2x - 40 = 0$

6.  $x^2 - 9 = 0$

12.  $6x^2 + x - 15 = 0$

ANSWERS:

1.  $x = -1, 1\frac{1}{2}$

4.  $y = -4, 9$

7.  $x = \frac{2}{5}, 1\frac{1}{2}$

10.  $x = -3, 12$

2.  $x = -2, 4$

5.  $x = \frac{1}{3}, \frac{1}{2}$

8.  $p = -3, 8$

11.  $x = -5, 4$

3.  $m = -6, -2\frac{1}{2}$

6.  $x = -3, 3$

9.  $x = 4$

12.  $x = -1\frac{2}{3}, 1\frac{1}{2}$