

Solving Quadratic Equations (B)

Solve each equation for x

1. $4x^2 + 32x - 35 = 1$

7. $18x^2 + 36x - 1 = 53$

2. $10x^2 - 31x + 2 = -13$

8. $9x^2 - 18x + 5 = -4$

3. $63x^2 + 83x + 2 = -22$

9. $9x^2 - x - 3 = 5$

4. $32x^2 + 48x - 15 = 17$

10. $6x^2 - 37x + 49 = -7$

5. $35x^2 - 46x - 7 = 9$

11. $6x^2 - 8x - 7 = 1$

6. $6x^2 + 43x = -7$

12. $6x^2 + 36x + 13 = -17$

Solving Quadratic Equations (B) Answers

Solve each equation for x

1. $4x^2 + 32x - 35 = 1$
 $4x^2 + 32x - 36 = 0$
 $(4x - 4)(x + 9) = 0$
 $x = 1, -9$

2. $10x^2 - 31x + 2 = -13$
 $10x^2 - 31x + 15 = 0$
 $(5x - 3)(2x - 5) = 0$
 $x = 3/5, 2\ 1/2$

3. $63x^2 + 83x + 2 = -22$
 $63x^2 + 83x + 24 = 0$
 $(9x + 8)(7x + 3) = 0$
 $x = -8/9, -3/7$

4. $32x^2 + 48x - 15 = 17$
 $32x^2 + 48x - 32 = 0$
 $(4x + 8)(8x - 4) = 0$
 $x = -2, 1/2$

5. $35x^2 - 46x - 7 = 9$
 $35x^2 - 46x - 16 = 0$
 $(5x - 8)(7x + 2) = 0$
 $x = 1\ 3/5, -2/7$

6. $6x^2 + 43x = -7$
 $6x^2 + 43x + 7 = 0$
 $(x + 7)(6x + 1) = 0$
 $x = -7, -1/6$

7. $18x^2 + 36x - 1 = 53$
 $18x^2 + 36x - 54 = 0$
 $(9x - 9)(2x + 6) = 0$
 $x = 1, -3$

8. $9x^2 - 18x + 5 = -4$
 $9x^2 - 18x + 9 = 0$
 $(9x - 9)(x - 1) = 0$
 $x = 1$

9. $9x^2 - x - 3 = 5$
 $9x^2 - x - 8 = 0$
 $(9x + 8)(x - 1) = 0$
 $x = -8/9, 1$

10. $6x^2 - 37x + 49 = -7$
 $6x^2 - 37x + 56 = 0$
 $(3x - 8)(2x - 7) = 0$
 $x = 2\ 2/3, 3\ 1/2$

11. $6x^2 - 8x - 7 = 1$
 $6x^2 - 8x - 8 = 0$
 $(6x + 4)(x - 2) = 0$
 $x = -2/3, 2$

12. $6x^2 + 36x + 13 = -17$
 $6x^2 + 36x + 30 = 0$
 $(x + 5)(6x + 6) = 0$
 $x = -5, -1$