Solving Quadratic Equations (C)

Solve each equation for x

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

2. $x^2 + 8x + 1 = -14$

3. $x^2 - 12x + 13 = -19$

4. $x^2 + x - 9 = 11$

5. $-x^2 + 8x - 6 = 9$

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

7. $x^2 + 3x - 3 = 37$

8. $x^2 - 7x + 7 = -5$

9. $x^2 - 3x - 4 = 6$

10. $x^2 - 11x + 1 = -17$

11. $-x^2 - x + 7 = -13$

12. $x^2 - 3x - 25 = 15$

Solving Quadratic Equations (C) Answers

Solve each equation for x

1. $x^2 + 4x - 4 = 8$
   $x^2 + 4x - 12 = 0$
   $(x + 6)(x - 2) = 0$
   $x = -6 , 2$

2. $x^2 + 8x + 1 = -14$
   $x^2 + 8x + 15 = 0$
   $(x + 5)(x + 3) = 0$
   $x = -5 , -3$

3. $x^2 - 12x + 13 = -19$
   $x^2 - 12x + 32 = 0$
   $(x - 8)(x - 4) = 0$
   $x = 8 , 4$

4. $x^2 + x - 9 = 11$
   $x^2 + x - 20 = 0$
   $(x + 5)(x - 4) = 0$
   $x = -5 , 4$

5. $-x^2 + 8x - 6 = 9$
   $-x^2 + 8x - 15 = 0$
   $(x - 3)(x - 5) = 0$
   $x = 3 , 5$

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

7. $x^2 + 3x - 3 = 37$
   $x^2 + 3x - 40 = 0$
   $(x - 5)(x + 8) = 0$
   $x = 5 , -8$

8. $x^2 - 7x + 7 = -5$
   $x^2 - 7x + 12 = 0$
   $(x - 4)(x - 3) = 0$
   $x = 4 , 3$

9. $x^2 - 3x - 4 = 6$
   $x^2 - 3x - 10 = 0$
   $(x + 2)(x - 5) = 0$
   $x = -2 , 5$

10. $x^2 - 11x + 1 = -17$
    $x^2 - 11x + 18 = 0$
    $(x - 2)(x - 9) = 0$
    $x = 2 , 9$

11. $-x^2 - x + 7 = -13$
    $-x^2 - x + 20 = 0$
    $-(x + 5)(x - 4) = 0$
    $x = -5 , 4$

12. $x^2 - 3x - 25 = 15$
    $x^2 - 3x - 40 = 0$
    $(x + 5)(x - 8) = 0$
    $x = -5 , 8$