Solving Quadratic Equations (A)

Solve each equation for x

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

2. $x^2 - 8x - 4 = 5$

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

4. $x^2 + 4x + 3 = 0$

5. $x^2 + x - 70 = 2$

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

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

8. $x^2 - 2x - 35 = 28$

9. $x^2 + 4x - 25 = 7$

10. $x^2 - 15x + 3 = -51$

11. $x^2 + 5x - 10 = 14$

12. $x^2 - 6 = 43$

Solving Quadratic Equations (A) Answers

Solve each equation for x

1. $x^2 - 4x - 1 = 4$
   $x^2 - 4x - 5 = 0$
   $(x - 5)(x + 1) = 0$
   $x = 5 \ , \ -1$

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

3. $x^2 - 3x = -2$
   $x^2 - 3x + 2 = 0$
   $(x - 1)(x - 2) = 0$
   $x = 1 \ , \ 2$

4. $x^2 + 4x + 3 = 0$
   $x^2 + 4x + 3 = 0$
   $(x + 3)(x + 1) = 0$
   $x = -3 \ , \ -1$

5. $x^2 + x - 70 = 2$
   $x^2 + x - 72 = 0$
   $(x + 9)(x - 8) = 0$
   $x = -9 \ , \ 8$

6. $x^2 + 9x = -8$
   $x^2 + 9x + 8 = 0$
   $(x + 1)(x + 8) = 0$
   $x = -1 \ , \ -8$

7. $x^2 + 6x - 15 = 12$
   $x^2 + 6x - 27 = 0$
   $(x - 3)(x + 9) = 0$
   $x = 3 \ , \ -9$

8. $x^2 - 2x - 35 = 28$
   $x^2 - 2x - 63 = 0$
   $(x - 9)(x + 7) = 0$
   $x = 9 \ , \ -7$

9. $x^2 + 4x - 25 = 7$
   $x^2 + 4x - 32 = 0$
   $(x + 8)(x - 4) = 0$
   $x = -8 \ , \ 4$

10. $x^2 - 15x + 3 = -51$
    $x^2 - 15x + 54 = 0$
    $(x - 9)(x - 6) = 0$
    $x = 9 \ , \ 6$

11. $x^2 + 5x - 10 = 14$
    $x^2 + 5x - 24 = 0$
    $(x - 3)(x + 8) = 0$
    $x = 3 \ , \ -8$

12. $x^2 - 6 = 43$
    $x^2 - 49 = 0$
    $(x - 7)(x + 7) = 0$
    $x = 7 \ , \ -7$

Solving Quadratic Equations (B)

Solve each equation for x

1. $x^2 - 10x + 6 = -18$

2. $x^2 - 3x - 23 = 31$

3. $x^2 + x - 34 = 38$

4. $x^2 - 3x - 8 = 2$

5. $x^2 + x - 24 = 6$

6. $x^2 + 7x - 3 = 5$

7. $x^2 + 13x + 32 = -8$

8. $x^2 + 2x - 10 = 25$

9. $x^2 - 6x - 11 = 5$

10. $x^2 - 4x - 3 = 18$

11. $x^2 - 2x - 2 = 22$

12. $x^2 + 6x + 4 = -1$

Solving Quadratic Equations (B) Answers

Solve each equation for x

1. $x^2 - 10x + 6 = -18$
   $x^2 - 10x + 24 = 0$
   $(x - 6)(x - 4) = 0$
   $x = 6 , 4$

2. $x^2 - 3x - 23 = 31$
   $x^2 - 3x - 54 = 0$
   $(x - 9)(x + 6) = 0$
   $x = 9 , -6$

3. $x^2 + x - 34 = 38$
   $x^2 + x - 72 = 0$
   $(x + 9)(x - 8) = 0$
   $x = -9 , 8$

4. $x^2 - 3x - 8 = 2$
   $x^2 - 3x - 10 = 0$
   $(x + 2)(x - 5) = 0$
   $x = -2 , 5$

5. $x^2 + x - 24 = 6$
   $x^2 + x - 30 = 0$
   $(x - 5)(x + 6) = 0$
   $x = 5 , -6$

6. $x^2 + 7x - 3 = 5$
   $x^2 + 7x - 8 = 0$
   $(x - 1)(x + 8) = 0$
   $x = 1 , -8$

7. $x^2 + 13x + 32 = -8$
   $x^2 + 13x + 40 = 0$
   $(x + 8)(x + 5) = 0$
   $x = -8 , -5$

8. $x^2 + 2x - 10 = 25$
   $x^2 + 2x - 35 = 0$
   $(x + 7)(x - 5) = 0$
   $x = -7 , 5$

9. $x^2 - 6x - 11 = 5$
   $x^2 - 6x - 16 = 0$
   $(x - 8)(x + 2) = 0$
   $x = 8 , -2$

10. $x^2 - 4x - 3 = 18$
    $x^2 - 4x - 21 = 0$
    $(x + 3)(x - 7) = 0$
    $x = -3 , 7$

11. $x^2 - 2x - 2 = 22$
    $x^2 - 2x - 24 = 0$
    $(x + 4)(x - 6) = 0$
    $x = -4 , 6$

12. $x^2 + 6x + 4 = -1$
    $x^2 + 6x + 5 = 0$
    $(x + 5)(x + 1) = 0$
    $x = -5 , -1$

Solving Quadratic Equations (C)

Solve each equation for x

1. $x^2 + 9x + 2 = -6$

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

3. $x^2 + 9x + 1 = -17$

4. $x^2 - 4 = 60$

5. $x^2 - 7x - 1 = 7$

6. $x^2 - 6x - 18 = 9$

7. $x^2 - 2x - 19 = 29$

8. $x^2 - 8x - 5 = 4$

9. $x^2 + 2x - 6 = 57$

10. $x^2 + 6x = -5$

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

12. $x^2 - 5x - 1 = 5$

Solving Quadratic Equations (C) Answers

Solve each equation for x

1. $x^2 + 9x + 2 = -6$
   $x^2 + 9x + 8 = 0$
   $(x + 1)(x + 8) = 0$
   $x = -1 , -8$

2. $x^2 + 3x - 1 = 3$
   $x^2 + 3x - 4 = 0$
   $(x - 1)(x + 4) = 0$
   $x = 1 , -4$

3. $x^2 + 9x + 1 = -17$
   $x^2 + 9x + 18 = 0$
   $(x + 6)(x + 3) = 0$
   $x = -6 , -3$

4. $x^2 - 4 = 60$
   $x^2 - 64 = 0$
   $(x - 8)(x + 8) = 0$
   $x = 8 , -8$

5. $x^2 - 7x - 1 = 7$
   $x^2 - 7x - 8 = 0$
   $(x + 1)(x - 8) = 0$
   $x = -1 , 8$

6. $x^2 - 6x - 18 = 9$
   $x^2 - 6x - 27 = 0$
   $(x - 9)(x + 3) = 0$
   $x = 9 , -3$

7. $x^2 - 2x - 19 = 29$
   $x^2 - 2x - 48 = 0$
   $(x + 6)(x - 8) = 0$
   $x = -6 , 8$

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

9. $x^2 + 2x - 6 = 57$
   $x^2 + 2x - 63 = 0$
   $(x - 7)(x + 9) = 0$
   $x = 7 , -9$

10. $x^2 + 6x = -5$
    $x^2 + 6x + 5 = 0$
    $(x + 5)(x + 1) = 0$
    $x = -5 , -1$

11. $x^2 + 2x - 11 = 13$
    $x^2 + 2x - 24 = 0$
    $(x + 6)(x - 4) = 0$
    $x = -6 , 4$

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

Solving Quadratic Equations (D)

Solve each equation for x

1. $x^2 - 13x + 32 = -8$

2. $x^2 - 6x + 4 = -4$

3. $x^2 - 2x - 1 = 7$

4. $x^2 + 2x - 31 = 4$

5. $x^2 - 8x + 6 = -10$

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

7. $x^2 - 9x + 1 = -7$

8. $x^2 + 5x - 30 = 6$

9. $x^2 + 6x + 1 = -8$

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

11. $x^2 + 10x + 4 = -21$

12. $x^2 + 12x + 11 = -21$

Solving Quadratic Equations (D) Answers

Solve each equation for x

1. $x^2 - 13x + 32 = -8$
   $x^2 - 13x + 40 = 0$
   $(x - 5)(x - 8) = 0$
   $x = 5 \ , \ 8$

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

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

4. $x^2 + 2x - 31 = 4$
   $x^2 + 2x - 35 = 0$
   $(x + 7)(x - 5) = 0$
   $x = -7 \ , \ 5$

5. $x^2 - 8x + 6 = -10$
   $x^2 - 8x + 16 = 0$
   $(x - 4)(x - 4) = 0$
   $x = 4$

6. $x^2 + 4x - 2 = 3$
   $x^2 + 4x - 5 = 0$
   $(x - 1)(x + 5) = 0$
   $x = 1 \ , \ -5$

7. $x^2 - 9x + 1 = -7$
   $x^2 - 9x + 8 = 0$
   $(x - 1)(x - 8) = 0$
   $x = 1 \ , \ 8$

8. $x^2 + 5x - 30 = 6$
   $x^2 + 5x - 36 = 0$
   $(x - 4)(x + 9) = 0$
   $x = 4 \ , \ -9$

9. $x^2 + 6x + 1 = -8$
   $x^2 + 6x + 9 = 0$
   $(x + 3)(x + 3) = 0$
   $x = -3$

10. $x^2 + 4x - 4 = 1$
    $x^2 + 4x - 5 = 0$
    $(x - 1)(x + 5) = 0$
    $x = 1 \ , \ -5$

11. $x^2 + 10x + 4 = -21$
    $x^2 + 10x + 25 = 0$
    $(x + 5)(x + 5) = 0$
    $x = -5$

12. $x^2 + 12x + 11 = -21$
    $x^2 + 12x + 32 = 0$
    $(x + 4)(x + 8) = 0$
    $x = -4 \ , \ -8$

Solving Quadratic Equations (E)

Solve each equation for x

1. $x^2 - 12x + 29 = -3$

2. $x^2 - 10x + 5 = -11$

3. $x^2 + 13x + 36 = -6$

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

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

6. $x^2 - 4x - 1 = 11$

7. $x^2 + 6x - 6 = 1$

8. $x^2 - 6x - 2 = 25$

9. $x^2 + 2x - 25 = 38$

10. $x^2 - x - 9 = 11$

11. $x^2 + 15x + 10 = -44$

12. $x^2 - 4x - 4 = 1$

Solving Quadratic Equations (E) Answers

Solve each equation for x

1. $x^2 - 12x + 29 = -3$
   $x^2 - 12x + 32 = 0$
   $(x - 8)(x - 4) = 0$
   $x = 8 , 4$

2. $x^2 - 10x + 5 = -11$
   $x^2 - 10x + 16 = 0$
   $(x - 2)(x - 8) = 0$
   $x = 2 , 8$

3. $x^2 + 13x + 36 = -6$
   $x^2 + 13x + 42 = 0$
   $(x + 7)(x + 6) = 0$
   $x = -7 , -6$

4. $x^2 - 5x - 3 = 3$
   $x^2 - 5x - 6 = 0$
   $(x - 6)(x + 1) = 0$
   $x = 6 , -1$

5. $x^2 - 8x - 2 = 7$
   $x^2 - 8x - 9 = 0$
   $(x - 9)(x + 1) = 0$
   $x = 9 , -1$

6. $x^2 - 4x - 1 = 11$
   $x^2 - 4x - 12 = 0$
   $(x - 6)(x + 2) = 0$
   $x = 6 , -2$

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

8. $x^2 - 6x - 2 = 25$
   $x^2 - 6x - 27 = 0$
   $(x - 9)(x + 3) = 0$
   $x = 9 , -3$

9. $x^2 + 2x - 25 = 38$
   $x^2 + 2x - 63 = 0$
   $(x + 9)(x - 7) = 0$
   $x = -9 , 7$

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

11. $x^2 + 15x + 10 = -44$
    $x^2 + 15x + 54 = 0$
    $(x + 6)(x + 9) = 0$
    $x = -6 , -9$

12. $x^2 - 4x - 4 = 1$
    $x^2 - 4x - 5 = 0$
    $(x + 1)(x - 5) = 0$
    $x = -1 , 5$

Solving Quadratic Equations (F)

Solve each equation for x

1. $x^2 + 3x - 34 = 6$

2. $x^2 + 14x + 33 = -15$

3. $x^2 - 5 = 44$

4. $x^2 + 6x + 5 = 0$

5. $x^2 + 5x - 2 = 22$

6. $x^2 + 14x + 26 = -23$

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

8. $x^2 + 5x - 3 = 11$

9. $x^2 - 7x + 9 = -3$

10. $x^2 - 8x + 4 = -3$

11. $x^2 + 2x - 9 = 54$

12. $x^2 - 14x + 7 = -41$

Solving Quadratic Equations (F) Answers

Solve each equation for x

1. $x^2 + 3x - 34 = 6$
   $x^2 + 3x - 40 = 0$
   $(x - 5)(x + 8) = 0$
   $x = 5 , -8$

2. $x^2 + 14x + 33 = -15$
   $x^2 + 14x + 48 = 0$
   $(x + 6)(x + 8) = 0$
   $x = -6 , -8$

3. $x^2 - 5 = 44$
   $x^2 - 49 = 0$
   $(x - 7)(x + 7) = 0$
   $x = 7 , -7$

4. $x^2 + 6x + 5 = 0$
   $x^2 + 6x + 5 = 0$
   $(x + 5)(x + 1) = 0$
   $x = -5 , -1$

5. $x^2 + 5x - 2 = 22$
   $x^2 + 5x - 24 = 0$
   $(x - 3)(x + 8) = 0$
   $x = 3 , -8$

6. $x^2 + 14x + 26 = -23$
   $x^2 + 14x + 49 = 0$
   $(x + 7)(x + 7) = 0$
   $x = -7$

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

8. $x^2 + 5x - 3 = 11$
   $x^2 + 5x - 14 = 0$
   $(x - 2)(x + 7) = 0$
   $x = 2 , -7$

9. $x^2 - 7x + 9 = -3$
   $x^2 - 7x + 12 = 0$
   $(x - 4)(x - 3) = 0$
   $x = 4 , 3$

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

11. $x^2 + 2x - 9 = 54$
    $x^2 + 2x - 63 = 0$
    $(x + 9)(x - 7) = 0$
    $x = -9 , 7$

12. $x^2 - 14x + 7 = -41$
    $x^2 - 14x + 48 = 0$
    $(x - 6)(x - 8) = 0$
    $x = 6 , 8$

Solving Quadratic Equations (G)

Solve each equation for x

1. $x^2 - 4x - 17 = 4$
2. $x^2 + 5x - 5 = 19$
3. $x^2 + 2x - 5 = 43$
4. $x^2 - 3x - 44 = 10$
5. $x^2 + 9x + 6 = -2$
6. $x^2 + 4x - 4 = 41$
7. $x^2 - 17x + 31 = -41$
8. $x^2 + 6x - 15 = 1$
9. $x^2 + 3x - 2 = 2$
10. $x^2 + 5x - 1 = 13$
11. $x^2 + 5x - 1 = 5$
12. $x^2 - 10x + 14 = -11$

Solving Quadratic Equations (G) Answers

Solve each equation for x

1. $x^2 - 4x - 17 = 4$
   $x^2 - 4x - 21 = 0$
   $(x + 3)(x - 7) = 0$
   $x = -3 , 7$

2. $x^2 + 5x - 5 = 19$
   $x^2 + 5x - 24 = 0$
   $(x + 8)(x - 3) = 0$
   $x = -8 , 3$

3. $x^2 + 2x - 5 = 43$
   $x^2 + 2x - 48 = 0$
   $(x - 6)(x + 8) = 0$
   $x = 6 , -8$

4. $x^2 - 3x - 44 = 10$
   $x^2 - 3x - 54 = 0$
   $(x + 6)(x - 9) = 0$
   $x = -6 , 9$

5. $x^2 + 9x + 6 = -2$
   $x^2 + 9x + 8 = 0$
   $(x + 8)(x + 1) = 0$
   $x = -8 , -1$

6. $x^2 + 4x - 4 = 41$
   $x^2 + 4x - 45 = 0$
   $(x - 5)(x + 9) = 0$
   $x = 5 , -9$

7. $x^2 - 17x + 31 = -41$
   $x^2 - 17x + 72 = 0$
   $(x - 9)(x - 8) = 0$
   $x = 9 , 8$

8. $x^2 + 6x - 15 = 1$
   $x^2 + 6x - 16 = 0$
   $(x + 8)(x - 2) = 0$
   $x = -8 , 2$

9. $x^2 + 3x - 2 = 2$
   $x^2 + 3x - 4 = 0$
   $(x - 1)(x + 4) = 0$
   $x = 1 , -4$

10. $x^2 + 5x - 1 = 13$
    $x^2 + 5x - 14 = 0$
    $(x + 7)(x - 2) = 0$
    $x = -7 , 2$

11. $x^2 + 5x - 1 = 5$
    $x^2 + 5x - 6 = 0$
    $(x + 6)(x - 1) = 0$
    $x = -6 , 1$

12. $x^2 - 10x + 14 = -11$
    $x^2 - 10x + 25 = 0$
    $(x - 5)(x - 5) = 0$
    $x = 5$

Solving Quadratic Equations (H)

Solve each equation for x

1. $x^2 - x - 5 = 1$

2. $x^2 - 9 = 40$

3. $x^2 - 13x + 4 = -32$

4. $x^2 + 9x + 16 = -2$

5. $x^2 - 6x + 8 = 0$

6. $x^2 - 15x + 56 = 0$

7. $x^2 + 5x - 2 = 4$

8. $x^2 - 16x + 44 = -19$

9. $x^2 + 2x - 5 = 58$

10. $x^2 + 8x - 6 = 3$

11. $x^2 - 3x - 24 = 16$

12. $x^2 + 11x = -18$

Solving Quadratic Equations (H) Answers

Solve each equation for x

1. $x^2 - x - 5 = 1$
   $x^2 - x - 6 = 0$
   $(x + 2)(x - 3) = 0$
   $x = -2 \ , \ 3$

2. $x^2 - 9 = 40$
   $x^2 - 49 = 0$
   $(x + 7)(x - 7) = 0$
   $x = -7 \ , \ 7$

3. $x^2 - 13x + 4 = -32$
   $x^2 - 13x + 36 = 0$
   $(x - 9)(x - 4) = 0$
   $x = 9 \ , \ 4$

4. $x^2 + 9x + 16 = -2$
   $x^2 + 9x + 18 = 0$
   $(x + 3)(x + 6) = 0$
   $x = -3 \ , \ -6$

5. $x^2 - 6x + 8 = 0$
   $x^2 - 6x + 8 = 0$
   $(x - 2)(x - 4) = 0$
   $x = 2 \ , \ 4$

6. $x^2 - 15x + 56 = 0$
   $x^2 - 15x + 56 = 0$
   $(x - 8)(x - 7) = 0$
   $x = 8 \ , \ 7$

7. $x^2 + 5x - 2 = 4$
   $x^2 + 5x - 6 = 0$
   $(x + 6)(x - 1) = 0$
   $x = -6 \ , \ 1$

8. $x^2 - 16x + 44 = -19$
   $x^2 - 16x + 63 = 0$
   $(x - 7)(x - 9) = 0$
   $x = 7 \ , \ 9$

9. $x^2 + 2x - 5 = 58$
   $x^2 + 2x - 63 = 0$
   $(x - 7)(x + 9) = 0$
   $x = 7 \ , \ -9$

10. $x^2 + 8x - 6 = 3$
    $x^2 + 8x - 9 = 0$
    $(x - 1)(x + 9) = 0$
    $x = 1 \ , \ -9$

11. $x^2 - 3x - 24 = 16$
    $x^2 - 3x - 40 = 0$
    $(x + 5)(x - 8) = 0$
    $x = -5 \ , \ 8$

12. $x^2 + 11x = -18$
    $x^2 + 11x + 18 = 0$
    $(x + 2)(x + 9) = 0$
    $x = -2 \ , \ -9$

Solving Quadratic Equations (I)

Solve each equation for x

1. $x^2 - 5x - 12 = 2$

2. $x^2 - 7x - 2 = 16$

3. $x^2 - 4x - 1 = 4$

4. $x^2 - 26 = 38$

5. $x^2 - 17x + 13 = -59$

6. $x^2 - 4x - 1 = 4$

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

8. $x^2 + 12x + 1 = -31$

9. $x^2 + 3x - 43 = 11$

10. $x^2 + 9x + 14 = 0$

11. $x^2 + 15x + 50 = -4$

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

Solving Quadratic Equations (I) Answers

Solve each equation for x

1. $x^2 - 5x - 12 = 2$
   $x^2 - 5x - 14 = 0$
   $(x - 7)(x + 2) = 0$
   $x = 7 , -2$

2. $x^2 - 7x - 2 = 16$
   $x^2 - 7x - 18 = 0$
   $(x + 2)(x - 9) = 0$
   $x = -2 , 9$

3. $x^2 - 4x - 1 = 4$
   $x^2 - 4x - 5 = 0$
   $(x - 5)(x + 1) = 0$
   $x = 5 , -1$

4. $x^2 - 26 = 38$
   $x^2 - 64 = 0$
   $(x - 8)(x + 8) = 0$
   $x = 8 , -8$

5. $x^2 - 17x + 13 = -59$
   $x^2 - 17x + 72 = 0$
   $(x - 9)(x - 8) = 0$
   $x = 9 , 8$

6. $x^2 - 4x - 1 = 4$
   $x^2 - 4x - 5 = 0$
   $(x + 1)(x - 5) = 0$
   $x = -1 , 5$

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

8. $x^2 + 12x + 1 = -31$
   $x^2 + 12x + 32 = 0$
   $(x + 8)(x + 4) = 0$
   $x = -8 , -4$

9. $x^2 + 3x - 43 = 11$
   $x^2 + 3x - 54 = 0$
   $(x + 9)(x - 6) = 0$
   $x = -9 , 6$

10. $x^2 + 9x + 14 = 0$
    $x^2 + 9x + 14 = 0$
    $(x + 2)(x + 7) = 0$
    $x = -2 , -7$

11. $x^2 + 15x + 50 = -4$
    $x^2 + 15x + 54 = 0$
    $(x + 6)(x + 9) = 0$
    $x = -6 , -9$

12. $x^2 - 6x + 7 = -2$
    $x^2 - 6x + 9 = 0$
    $(x - 3)(x - 3) = 0$
    $x = 3$

Solving Quadratic Equations (J)

Solve each equation for x

1. $x^2 - 7x + 2 = -10$

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

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

4. $x^2 - 14x + 9 = -36$

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

6. $x^2 - 13x + 17 = -25$

7. $x^2 + 14x + 1 = -44$

8. $x^2 - 11x + 2 = -22$

9. $x^2 + 13x + 26 = -14$

10. $x^2 + x - 1 = 29$

11. $x^2 + 14x + 5 = -43$

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

Solving Quadratic Equations (J) Answers

Solve each equation for x

1. $x^2 - 7x + 2 = -10$
   $x^2 - 7x + 12 = 0$
   $(x - 3)(x - 4) = 0$
   $x = 3 , 4$

2. $x^2 + 3x = -2$
   $x^2 + 3x + 2 = 0$
   $(x + 1)(x + 2) = 0$
   $x = -1 , -2$

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

4. $x^2 - 14x + 9 = -36$
   $x^2 - 14x + 45 = 0$
   $(x - 5)(x - 9) = 0$
   $x = 5 , 9$

5. $x^2 - 8x + 5 = -2$
   $x^2 - 8x + 7 = 0$
   $(x - 7)(x - 1) = 0$
   $x = 7 , 1$

6. $x^2 - 13x + 17 = -25$
   $x^2 - 13x + 42 = 0$
   $(x - 7)(x - 6) = 0$
   $x = 7 , 6$

7. $x^2 + 14x + 1 = -44$
   $x^2 + 14x + 45 = 0$
   $(x + 5)(x + 9) = 0$
   $x = -5 , -9$

8. $x^2 - 11x + 2 = -22$
   $x^2 - 11x + 24 = 0$
   $(x - 3)(x - 8) = 0$
   $x = 3 , 8$

9. $x^2 + 13x + 26 = -14$
   $x^2 + 13x + 40 = 0$
   $(x + 5)(x + 8) = 0$
   $x = -5 , -8$

10. $x^2 + x - 1 = 29$
    $x^2 + x - 30 = 0$
    $(x - 5)(x + 6) = 0$
    $x = 5 , -6$

11. $x^2 + 14x + 5 = -43$
    $x^2 + 14x + 48 = 0$
    $(x + 6)(x + 8) = 0$
    $x = -6 , -8$

12. $x^2 + 7x + 5 = -5$
    $x^2 + 7x + 10 = 0$
    $(x + 5)(x + 2) = 0$
    $x = -5 , -2$