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