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