

1. Solve by factoring: $2x^2 + 5x = 3$

2. Solve by factoring: $3x(4x - 7) - 2 = 4$

3. Solve by using the square root property: $3x^2 = 16$

4. Solve by using the square root property: $(x - 2)^2 = 25$

5. Solve by using the square root property: $x^2 - 4x + 4 = 36$

6. Solve by **completing the square**: $2x^2 - 3x - 4 = 0$

7. Solve using the **quadratic equation**: $2x^2 - 3x - 4 = 0$

8. Tom has a rectangular garden. Its length measures 2 feet more than its width. He is planning to extend the length and width each by one foot. The area of the new garden will be 132 square feet. What is the width of the old garden?

9. Calculate the Discriminate of the quadratic equation $3x^2 + 4x + 5 = 0$ and determine the nature of the solutions of the equation.

10. Find the quadratic equation whose two solutions are 3 and -2.