

Name :

Quadratic Word Problems Worksheet

Solve the given questions.

1. The width of a rectangle is 3 units less than the length. Its area is 54 units. Find the length and width of the rectangle.

2. The square of a number increased by twice the number is 48. Find the solutions.

3. If three times a positive number is subtracted from the square of the number, the result is 10. Find the number.

4. A parabola with its vertex at (3, 2), passes through the point (-1, 10). If the equation of the parabola is given by $ax^2 + bx + c = 0$, find a, b, and c.

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Answers

1. The width of a rectangle is 3 units less than the length. Its area is 54 units. Find the length and width of the rectangle.

Length = 9 units, width = 6 units

2. The square of a number increased by twice the number is 48. Find the solutions.

6, -8

3. If three times a positive number is subtracted from the square of the number, the result is 10. Find the number.

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4. A parabola with its vertex at (3, 2), passes through the point (-1, 10). If the equation of the parabola is given by $ax^2 + bx + c = 0$, find a, b, and c.

$a = \frac{1}{2}, b = -3, c = \frac{13}{2}$