

Quadratic Word Problems

- ① The length of a theatre's screen is 7 feet more than twice its width. Find the dimensions of the screen if its perimeter is 62 feet.

- ② The difference of the squares of two consecutive even integers is 68. Find the numbers.

- ③ The altitude of a triangle is 5 cm less than its base. The area of the triangle is 42 cm^2 . Find its base and altitude.

- ④ A natural number whose square when increased by 76 is 36 more than 8 times the number itself. Find the number.

- ⑤ When 10 is subtracted from the square of a number, the result is 3 times the number. Find the solutions.

Quadratic Word Problems

Answers

- ① The length of a theatre's screen is 7 feet more than twice its width. Find the dimensions of the screen if its perimeter is 62 feet.

Length = 23 inches, width = 8 inches

- ② The difference of the squares of two consecutive even integers is 68. Find the numbers.

16, 18

- ③ The altitude of a triangle is 5 cm less than its base. The area of the triangle is 42 cm^2 . Find its base and altitude.

Base = 12 cm, altitude = 7 cm

- ④ A natural number whose square when increased by 76 is 36 more than 8 times the number itself. Find the number.

576

- ⑤ When 10 is subtracted from the square of a number, the result is 3 times the number. Find the solutions.

5, -2