

1) The Square of a number minus twice the number is 48. Find this number.

2) The height of a triangular sail is $1\frac{1}{2}$ meters more than the base. The area of the sail is $3\frac{1}{2}$ square meters. Find the base and height of the sail.

3) The product of two consecutive integers is 182. Find these two integers. (Hint: If x represents an integer, how could you represent the next consecutive integer—what would you count by??)

4) The product of two consecutive **odd** integers is 255. Find these two integers.

5) The length of a rectangle is 4m greater than its width. The area of this rectangle is 96 m^2 . Find the length and the width.

6) The measure of the area of a square is 5 feet more than its perimeter. Find the length of a side.

7) If the sides of a square are lengthened by 3 m, the area becomes 81 m^2 . Find the length of a side of the original side.

8) The cube of a number is the same as twice the square of the number. Find the number.

9) A garden measuring 12 meters by 16 meters is to have a pedestrian pathway installed all around it, increasing the total area to 285 square meters. What will be the width of the pathway?

10) The product of two consecutive negative integers is 1122. What are the numbers?

11) If you subtract a number from four times its square, the result is three. Find that number.

12) Eight more than the square of a number is six times that number. Find the number.

13) The product of two consecutive even integers is 168. Find these two integers.

14) The base of a triangle is 10 cm larger than its height. The area of this triangle is 28 cm^2 . Find the height and base.