



# How to Calculate Area of Rectangles and Triangles

KS2 MATHS

GEOMETRY

MEASUREMENT

Ages 9-12



3 min read

## What is Area?

**Area** is the amount of space that a flat shape takes up. Imagine you're painting a wall or laying tiles on a floor — the area tells you how much paint or how many tiles you need. We measure area in **square units**, like square centimetres (cm<sup>2</sup>) or square metres (m<sup>2</sup>).

Think of it like: counting how many square tiles would cover your bathroom floor. Each tile is one square unit, and the total number of tiles is the area.

## How to Find the Area of a Rectangle

A **rectangle** is a shape with four sides and four right angles (90-degree corners). To find its area, you multiply the **length** by the **width**.

**Formula: Area = length × width**

For example, if you have a rectangle that is **10 cm long** and **5 cm wide**, the area would be  $10 \times 5 = 50 \text{ cm}^2$ . A **square** is a special rectangle where all sides are equal, so you'd multiply one side by itself.

Think of it like: a chocolate bar that is 10 squares across and 5 squares down. Count all the squares: 50 in total!

## How to Find the Area of a Triangle

A **triangle** has three sides and three corners. Here's something clever: a triangle is exactly **half the size of a rectangle** with the same length and height. This means you multiply the length (called the **base**) by the **height**, then divide by 2.

**Formula: Area = (base × height) ÷ 2**

If your triangle has a base of **10 cm** and a height of **6 cm**, the area would be  $(10 \times 6) \div 2 = 30 \text{ cm}^2$ . The height is always measured straight up from the base at a **right angle**, not along the slanted side.

Think of it like: cutting a rectangle sandwich in half diagonally. Two triangles make one rectangle, so one triangle is half the area.

## **Why Does This Matter?**

These formulas help us solve real problems: decorating a room, designing gardens, building houses, or even working out how much fabric you need to make a kite. Maths isn't just about numbers on paper — it's about understanding the world around you!