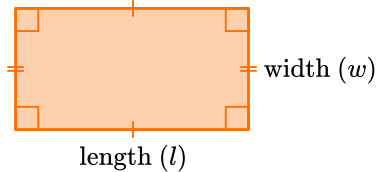


Key vocabulary

perimeter, composite, area, width, irregular shape, cube, cuboid, miles, parallelogram, perpendicular height, volume

Area of rectangles

Area is measured in square units, such as cm^2 or m^2 . To find the area of a rectangle, multiply the length by the width.



For example, the area of the rectangle below is 28m^2 .



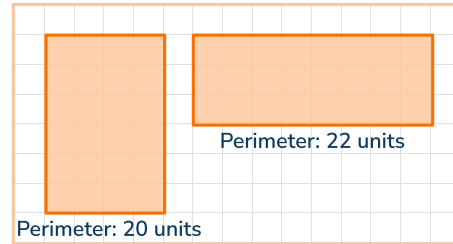
Same perimeter, different area

Same perimeter, different area
Shapes with the same perimeter can have different areas. For example, the two rectangles below all have a perimeter of 12 units but areas of 9 and 5 square units.



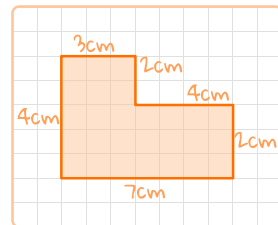
Same area, different perimeter

Shapes with the same area can have different perimeters. For example, the two rectangles below both have an area of 24 square units but perimeters of 20 and 22 units.



Perimeter of composite shapes

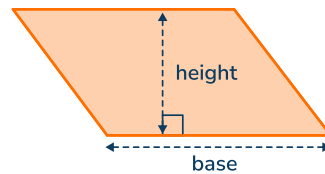
A composite shape, or compound shape, is a shape made of two basic shapes put together, such as two rectangles in the example below. To find the perimeter of a composite shape, add all the side lengths together.



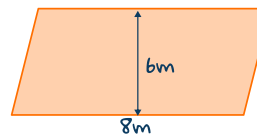
The perimeter of this composite shape is 22cm.

Area of parallelograms

To find the area of a triangle, multiply the base by the perpendicular height.



For example, the area of this parallelogram is 48m^2 .

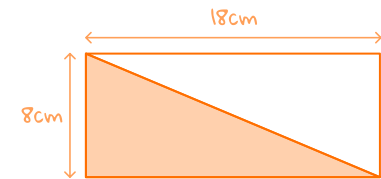


Area of triangles

To find the area of a triangle, multiply the base by the perpendicular height and divide it by 2. This is because a triangle is half the area of a quadrilateral with the same base and height measurements.



For example, the area of the triangle below is 72cm^2 (half of 8×18).

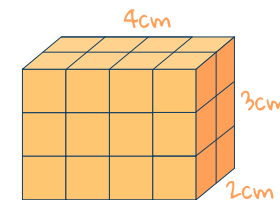


Volume of cuboids

The volume of a 3-D shape is the amount of space it takes up, usually measured in mm^3 , cm^3 , m^3 or km^3 . To find the volume of a cuboid, multiply the length by the width and height.



For example, the volume of the cuboid below is 24cm^3 .



Estimate area of irregular shapes

The area of irregular shapes can be found by counting the number of whole squares covered by the shape and adding it to the estimated number of partly covered squares. For example, an estimation of the area of the shape below is 6 square units.

