

2D Shapes



CLERICAL MEDICAL

A 2D shape can be described in a number of different ways, including:

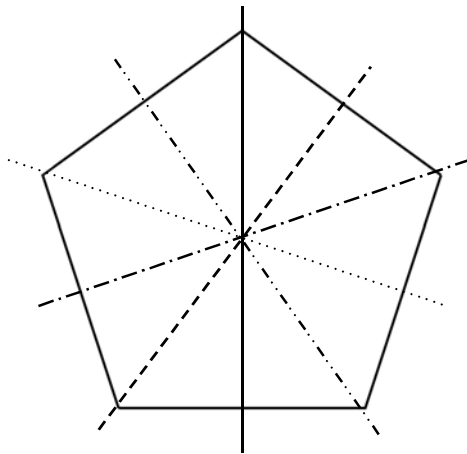
You will need:

- a ruler
- a protractor
- a calculator

Sides: The number of sides it has have.

Perimeter: The sum of the lengths of all of the sides.

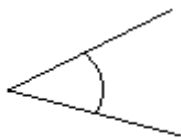
Lines of symmetry: How many lines of symmetry the shape has and where they are. If a shape is divided along a line of symmetry the pieces would be mirror images of each other. Below is a pentagon which has had its 5 lines of symmetry drawn through it.



Angles:

- The size of the angles it contains.
- The type of angles it contains.

a) Acute angle = less than 90°



b) Right angle = 90°



c) Obtuse angle = between 90° and 180°

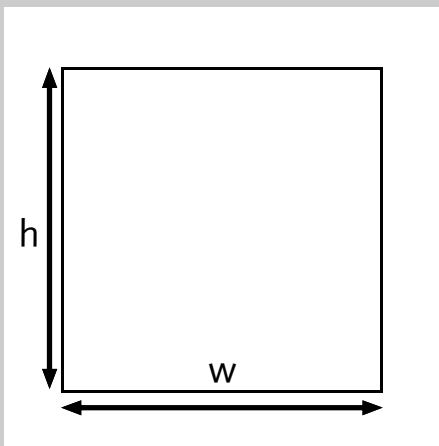


d) Reflex angle = more than 180°



Area: The area of the shape, which can be calculated using formulae.

On the following pages are a number of shapes for you to measure and describe.



Square

Perimeter

Lines of symmetry: draw on shape

Angles

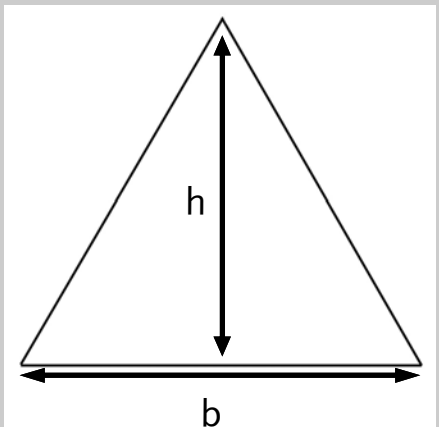
Acute angles
Number of

Right angles

Obtuse angles

Area (height x width)

Working



Equilateral triangle

Perimeter

Lines of symmetry: draw on shape

Angles

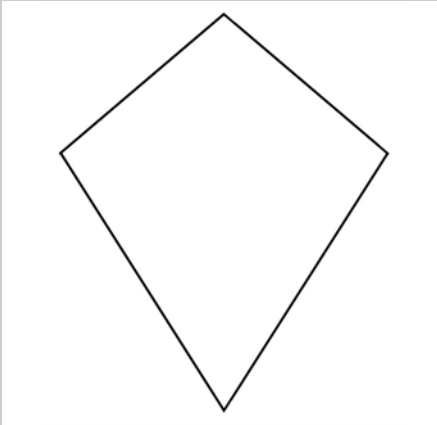
Acute angles
Number of

Right angles

Obtuse angles

Area ($\frac{1}{2}$ x height x base)

Working



Kite

Perimeter

Lines of symmetry: draw on shape

Angles

Acute angles

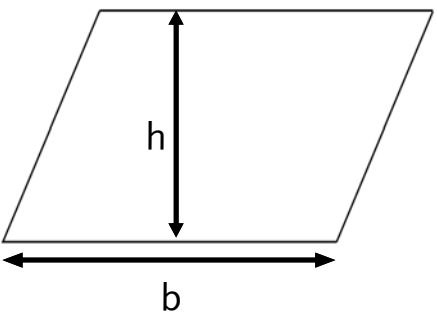
Right angles

Obtuse angles

Number of

Area (Divide into 2 triangles)

Working



Parallelogram

Perimeter

Lines of symmetry: draw on shape

Angles

Acute angles

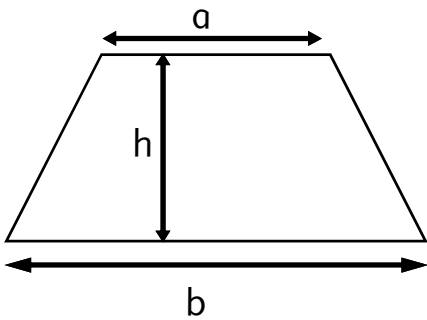
Right angles

Obtuse angles

Number of

Area (height x base)

Working



Trapezium

Perimeter

Lines of symmetry: draw on shape

Angles

Acute angles

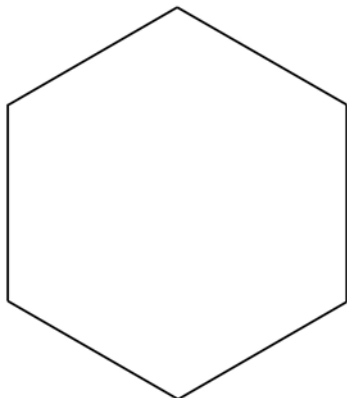
Right angles

Obtuse angles

Number of

Area ($\frac{1}{2} \times (a + b) \times h$)

Working



Regular Hexagon

Perimeter

Lines of symmetry: draw on shape

Angles

Acute angles

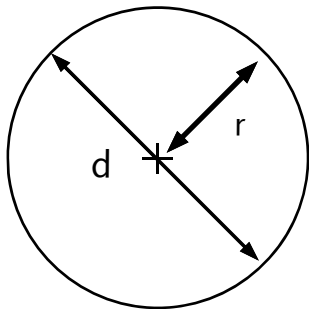
Right angles

Obtuse angles

Number of

Area (Divide either into 2 trapeziums or 6 triangles)

Working



Circle

Circumference of circle ($d \times \pi$)

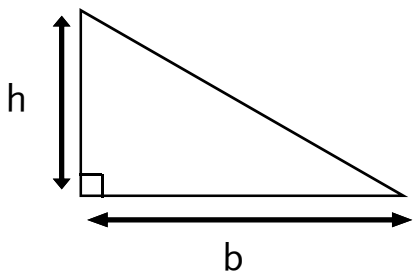
How many lines of symmetry are there?

Area ($\pi \times r^2$)

NB $r = \text{radius}$ and $d = \text{diameter}$

Working

Right angle triangle



Perimeter

Lines of symmetry: draw on shape

Angles

Acute angles

Right angles

Obtuse angles

Number of

Area ($\frac{1}{2} \times \text{height} \times \text{base}$)

Working