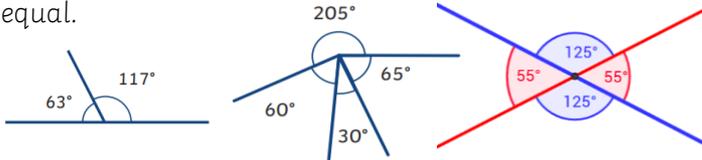


Key concepts and questions

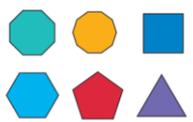
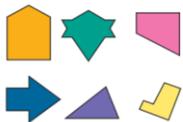
What is the missing angle?

Angles on a straight line equal 180° and angles around a point equal 360° . Vertically opposite angles are always equal.



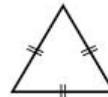
Is this shape regular or irregular?

Regular shapes have sides that are all the same length (equilateral) and angles which are all the same size (equiangular).

| Regular | Irregular |
|---|---|
|  |  |

Key Vocabulary

| | | | |
|---------------|---|--------------|--|
| Right angle | Acute angle | Obtuse angle | Reflex angle |
| Degrees | 2D | 3D | Regular |
| irregular | coordinates | plot | x-axis |
| Y-axis | Negative numbers | | |
| Net | 2D shape which folds to make a 3D shape | Prism | Bases are the same shape and all other faces are, usually, rectangles. |
| Quadrilateral | A 4 sided, 2D shape | Polygon | A 2D shape with straight sides. |



Equilateral Triangle
3 equal sides & angles



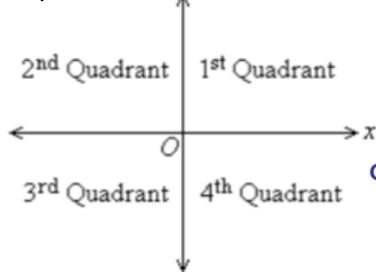
Isosceles Triangle
2 equal sides & angles



Scalene Triangle
0 equal sides & angles

Representations

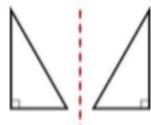
4 quadrants



Position

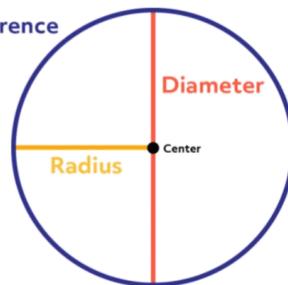


Translation



Reflection

Parts of circles



Making Connections

Negative numbers and coordinates

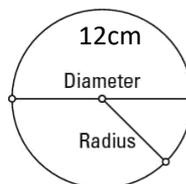
Coordinates are always read by going along the horizontal axis then the vertical axis.

Use your knowledge of negative numbers to help read the axis.

Algebra

In a circle, the diameter is always double the radius, which means the radius is half the diameter.

e.g. In this circle, the diameter is 12cm so the radius is 6cm as $12\text{cm} \div 2 = 6\text{cm}$



You can use algebra to help find missing amounts.

d means diameter, r means radius

$$d = 2 \times r \quad r = d \div 2$$

Or finding a missing value in angles on a straight line:

$$\text{Angle } a = 180 - (\text{angle } b + \text{angle } c)$$