
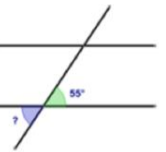
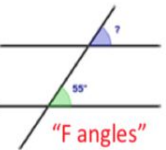
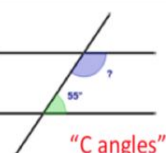
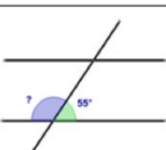


Y7 Maths Block 2 - Angles

Angles in Parallel Lines

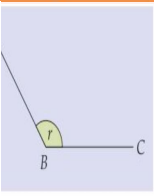
 <p>"Z angles"</p>	Relationship	Properties
Alternate Angles	Equal	
 <p>"C angles"</p>	Relationship	Properties
Opposite Angles	Equal	
 <p>"F angles"</p>	Relationship	Properties
Corresponding Angles	Equal	
 <p>"Z angles"</p>	Relationship	Properties
Co-interior Angles	Add up to 180°	
 <p>"C angles"</p>	Relationship	Properties
Angles on a straight line	Add up to 180°	

A **quadrilateral** is a 2d shape with 4 sides and 4 angles

A **regular polygon** has sides that are the same and angles the same - like a square
 An **irregular polygon** has sides and angles that may be different from each other

Angles

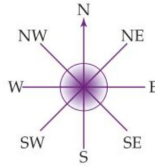
An angle is a measure of turn
 You can measure the turn in degrees
 ° is the symbol for degrees
 You can describe this angle as angle ABC angle CBA or angle *r*



There are 90° in a **right angle**.
 This is a $\frac{1}{4}$ turn

There are 180° on a **straight line**.
 This is half a turn

There are 360° in a full turn at a **point**.



Triangles

Equilateral

3 equal angles
3 equal sides

Isosceles

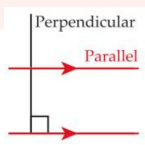
2 equal angles
2 equal sides

Scalene

No equal angles
No equal sides

Right-angled

One 90° angle



Angle Facts

angles on a straight line add up to 180°

Angles in a quadrilateral add up to 360°

angles in a triangle add up to 180°

angles at a point add up to 360°

Types of Angles

Acute

Smaller than 90°

Obtuse

Bigger than 90° but smaller than 180°

Reflex

Larger than 180°

Right angle

If two lines are at right angles, they are **perpendicular**.

Straight line

180°

Full circle

360°

Check your units!

Angles are usually measured in degrees, with 360° making a full turn. This is different to degrees Celsius, which measures temperature.

The interior angles of a polygon are the total sum of the angles inside the polygon
Interior angles of a quadrilateral = 360°

Quadrilaterals

Square

4 right angles
4 equal sides
2 pairs parallel sides

Rectangle

4 right angles
2 pairs equal sides
2 pairs parallel sides

Rhombus

2 pairs equal angles
4 equal sides
2 pairs parallel sides

Parallelogram

2 pairs equal angles
2 pairs equal sides
2 pairs parallel sides

Trapezium

1 pair parallel sides

Isosceles trapezium

2 pairs equal angles
1 pair equal sides
1 pair parallel sides

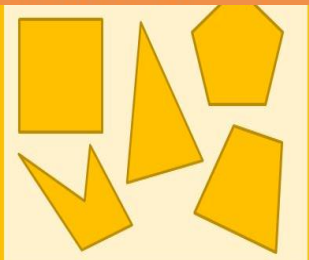
Kite

1 pair equal angles
2 pairs equal sides
No parallel sides

Arrowhead

1 pair equal angles
2 pairs equal sides
No parallel sides

Polygons



A **Polygon** is a **closed** 2D shape made of **straight lines**

poly = many
 gon = angle
Polygon = many angles