

Mathematical Literacy – Angle Reasons

Basic facts:

- Angles on a straight line add up to 180° .
- Angles at a point add up to 360° .
- Angles in a triangle add up to 180°
- Base angles of an isosceles triangle are equal.
- Angles in an equilateral triangle are equal.
- Angles in a quadrilateral add up to 360°

Parallel lines:

- Vertically opposite angles are equal.
- Alternate angles are equal.
- Corresponding angles are equal.
- Supplementary angles add up to 180° .

Polygons:

- Exterior angles of a polygon add up to 360°
- The interior and exterior angle of any polygon add up to 180°

Circle Theorems:

- Angles in the same segment are equal.
- The angle at the centre of a circle is twice the angle at the circumference.
- Angles in a semicircle are 90° .
- Opposite angles of a cyclic quadrilateral are supplementary.
- The tangent to a circle is perpendicular (90°) to the radius.
- Alternate segment theorem.
- Tangents from an external point are equal in length.