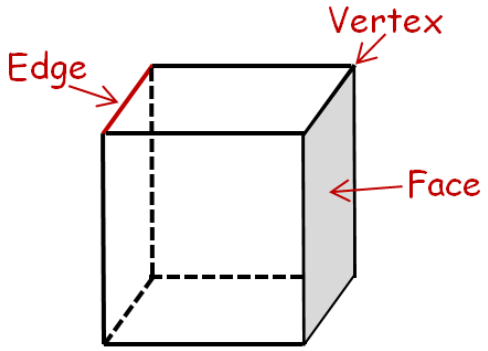
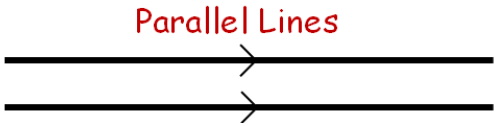
MATHEMATICS Unit 4: Visualising and constructing	Year Group: 7 set 1-3

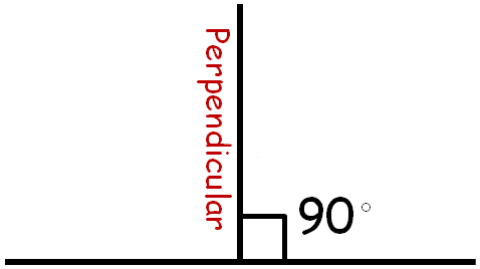
Key Vocabulary

Edge	The side of a polygon or line segment where two faces of a solid figure meet
Face	Flat surface of a 3d shape
Vertex (vertices)	A point where the edges of a solid figure meets. (A corner)
Plane	A flat, 2 dimensional surface
Regular polygon	Shapes where all sides and angle are equal.
Perpendicular	Two lines meeting at a right angle
Parallel	Equidistant – the same distance apart. Never touching
Rotational symmetry	A shape has rotational symmetry, if when it is turned around its centre point, it matches it's original outline at least once or more

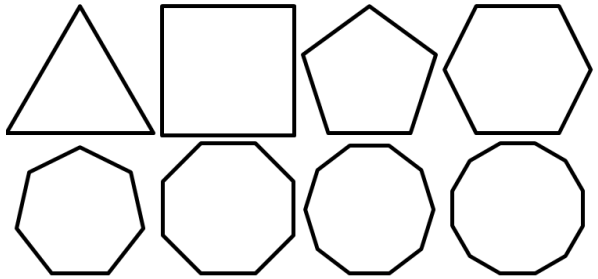
Key facts / Diagrams







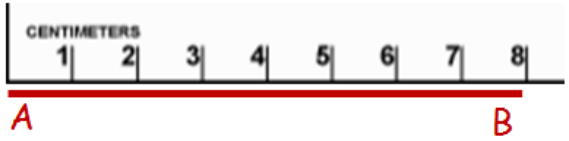
Regular Polygons



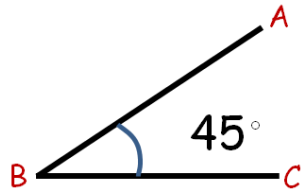
Common misconceptions

- Two line segments that do not touch are perpendicular if they would meet at right angles when extended
- Pupils may believe, incorrectly, that:
  - perpendicular lines have to be horizontal / vertical
  - only straight lines can be parallel
  - all triangles have rotational symmetry of order 3
  - all polygons are regular

Worked examples



Line AB = 8cm



∠ABC = 45°