

Angles – Y11 Foundation – Unit 2



What do I need to be able to do?

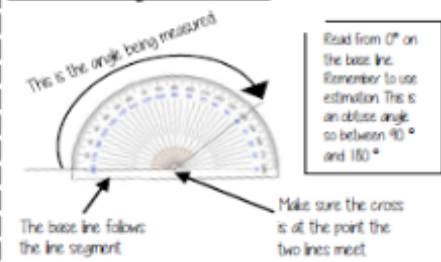
By the end of this unit you should be able to:

- understand and use alternate and corresponding angles on parallel lines
- derive and use the sum of angles in a triangle (e.g. to deduce and use the angle sum in any polygon, and to derive properties of regular polygons)
- deduce and use the angle sum in any polygon, and to derive properties of regular polygons.

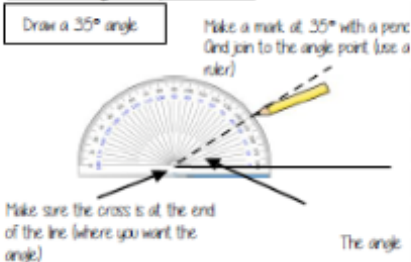
Vocabulary

- Angle:** the amount of turn between two lines around their common point.
- Parallel:** lines on a plane that never meet. They are always the same distance apart.
- Polygon:** a two-dimensional shape with straight sides.
- Interior:** the angles that lie inside a polygon.
- Exterior:** the angle between a side of a polygon and an extended adjacent side.
- Sum:** the answer you get when you add together.
- Triangle:** a 3 sided shape. The angles sum to 180° .

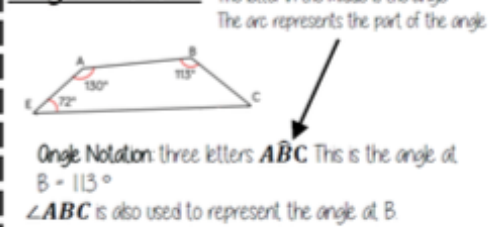
Measure angles to 180°



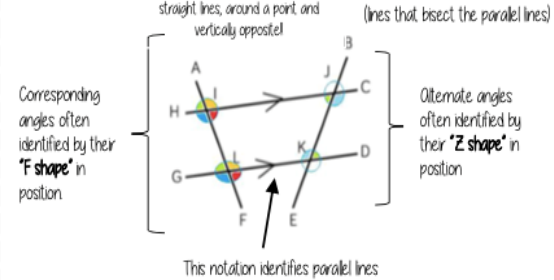
Draw angles up to 180°



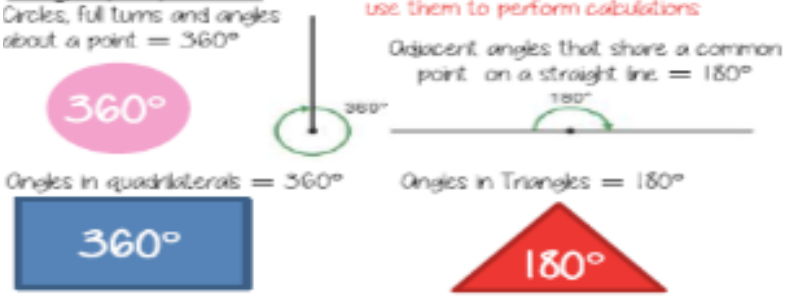
Angle notation



Parallel lines

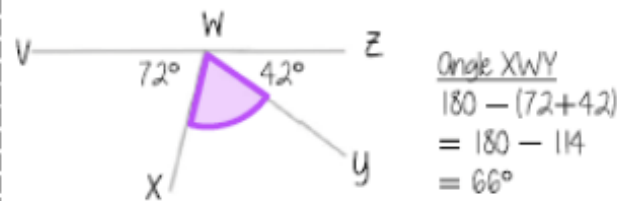


Angle properties

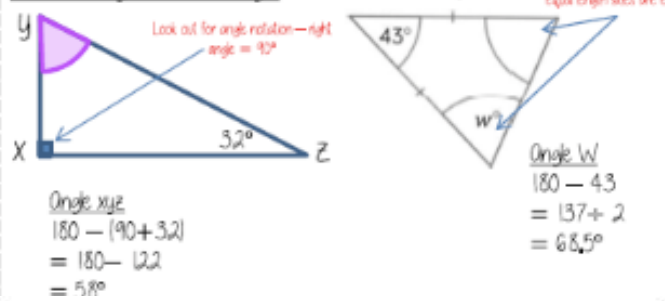


Sum of angles on a straight line

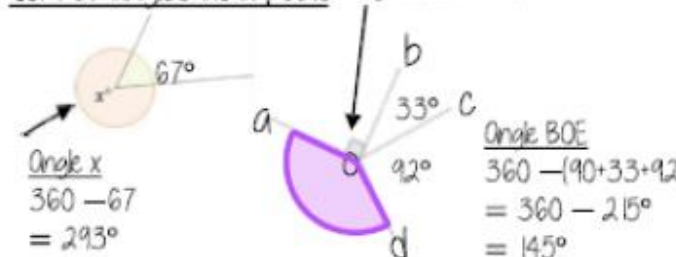
Adjacent angles that share a common point on a straight line =



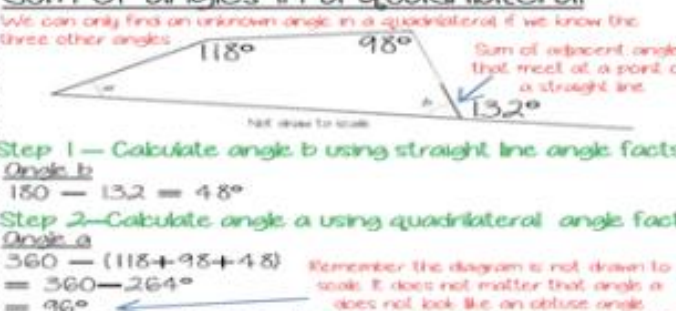
Sum of angles in a triangle



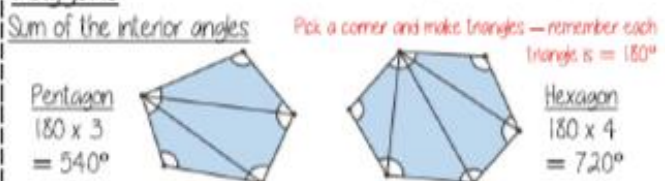
Sum of angles at a point



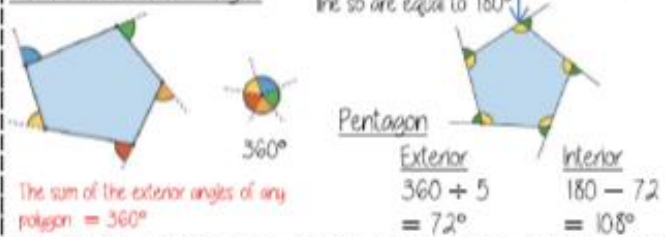
Sum of angles in a quadrilateral



Polygons



Interior and exterior angles



Parallel lines

