

Angles



**Acute angles**  
Any angles that measure less than  $90^\circ$

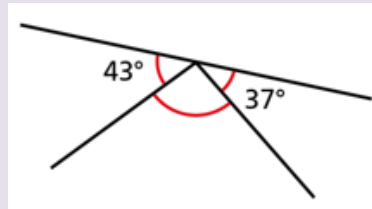
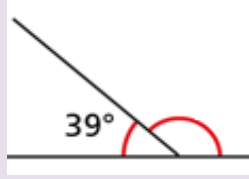
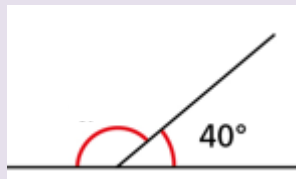


**Obtuse angles**  
Any angles that measure more than  $90^\circ$  and less than  $180^\circ$

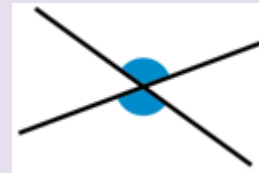
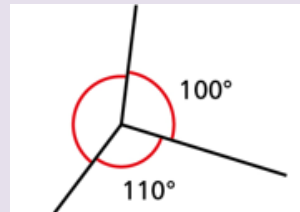
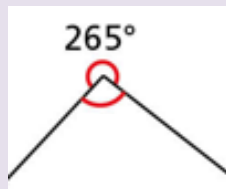
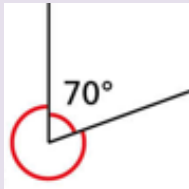


**Reflex angles**  
Any angles that measure more than  $180^\circ$

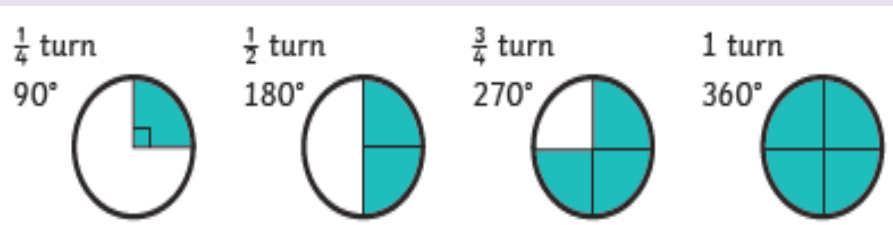
Angles on a straight line always total  $180^\circ$



Angles around a point always total  $360^\circ$



Opposite angles that meet at a vertex are equal



Multiples of  $90^\circ$  can be used as descriptions of turns

Vocabulary

acute angle

right angle

obtuse angle

reflex angle

quadrilateral

regular polygon

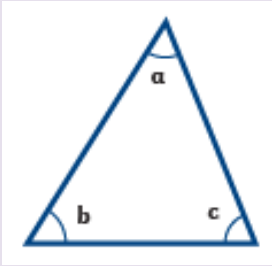
interior angles

radius

diameter

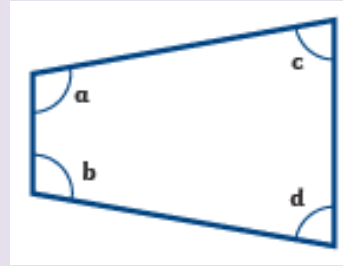
circumference

## Angles



Angles in any triangle total  $180^\circ$

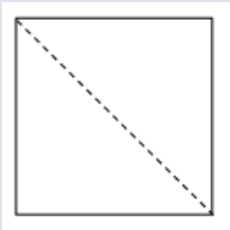
$$a + b + c = 180^\circ$$



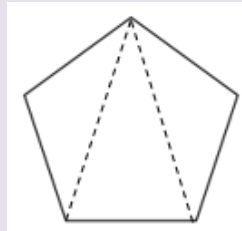
Angles in any quadrilateral total  $360^\circ$

$$a + b + c + d = 360^\circ$$

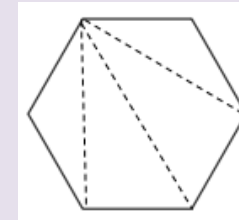
**Angles in regular polygons** The sum of interior angles in a triangle is  $180^\circ$



A square can be split into 2 triangles.  
The sum of interior angles is  
 $2 \times 180^\circ = 360^\circ$

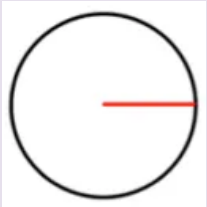


A pentagon can be split into 3 triangles.  
The sum of interior angles is  
 $3 \times 180^\circ = 540^\circ$

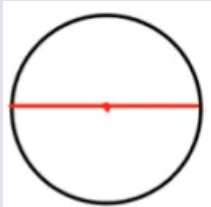


A hexagon can be split into 4 triangles.  
The sum of interior angles is  
 $4 \times 180^\circ = 720^\circ$

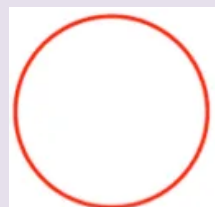
## Parts of a Circle



radius



diameter



circumference

- The perimeter of a circle is called the **circumference**.
- The distance across the circle, passing through the centre is called the **diameter**
- The distance from the centre of the circle to the circumference is called the **radius**.
- $2 \times \text{radius} = \text{diameter}$        $d = r \times 2$