

# Geometric Reasoning

## Key Vocabulary

Acute— **A/cute**— An angle that measures less than  $90^\circ$

Obtuse—**Ob/tuse**— An angle that measures greater than  $90^\circ$  but less than  $180^\circ$

Reflex—**Re/fl/ex**— An angle that measures greater than  $180^\circ$  but less than  $360^\circ$

Interior Angle —**In/ter/i/or An/g/le**— The angle inside a polygon

Exterior Angle— **Ex/ter/i/or An/g/le**—The angle outside a polygon when you extend the line from the angle

Intersect— **In/ter/sec/t**—Where two lines cross

Parallel— **Pa/ra/llel**— Lines that do not touch if you continue them

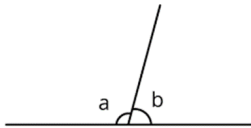
Perpendicular— **Per/pen/dic/u/lar**—Lines that would cross at  $90^\circ$  if you continued them

Vertex— **Ver/tex**—A corner

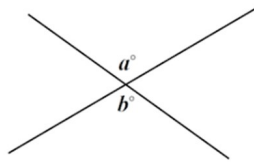
Vertically Opposite Angles— **Ver/tic/al/ly Opp/o/site**—Angles that are opposite each other when two lines intersect each other

Transversal— **Trans/ver/sal**—A line that cuts two lines

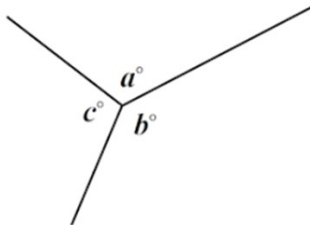
## Angles



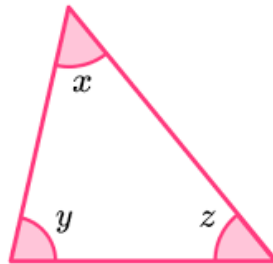
Angles on a straight line add up to  $180^\circ$



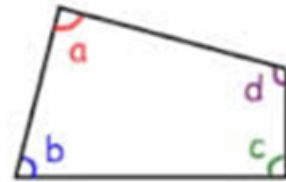
Vertically opposite angles are equal



Angles around a point add up to  $360^\circ$

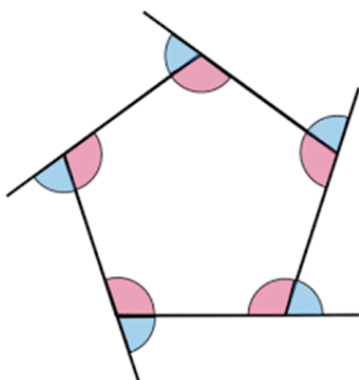


Angles in a triangle add up to  $180^\circ$



Angles in any quadrilateral add up to  $360^\circ$

## Angles in Polygons



The exterior angles (the blue angles) on any polygon add up to  $360^\circ$

One exterior and interior angle (a red and blue angle) add up to  $180^\circ$  as they make a straight line