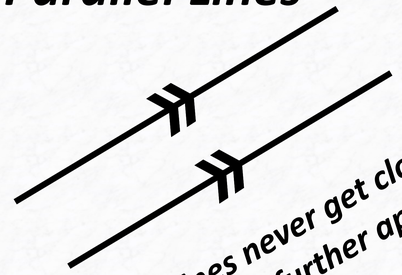
Useful Angle Facts

Vertically Opposite Angles



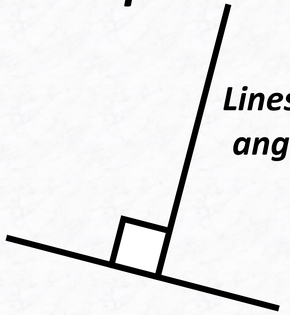
Angles on opposite sides, where two straight lines cross, are the same size

Parallel Lines



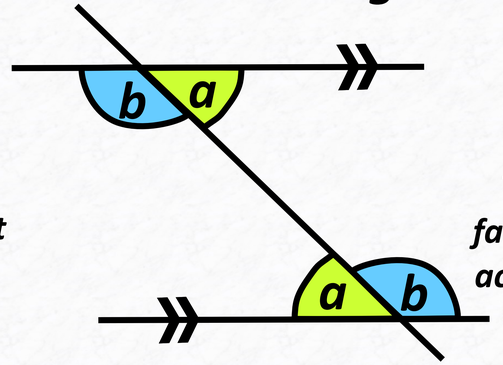
Parallel lines never get closer together, or further apart

Perpendicular Lines



Lines that meet at right angles (90°) are called perpendicular

Alternate Angles



Angles inside the 'Z' shape are both equal

$a = a \quad b = b$

Corresponding Angles

There are two useful facts about a line drawn across two parallel lines

Angles inside the 'C' shape add up to 180°

$a + b = 180°$

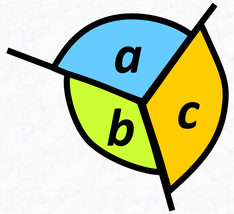
Angles on a Straight Line



Any angles that make a straight line will always add up to 180°

$a + b = 180°$

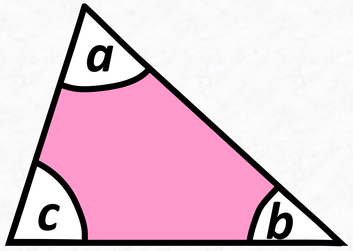
Angles around a Point



Angles that make a full circle will always add up to 360°

$a + b + c = 360°$

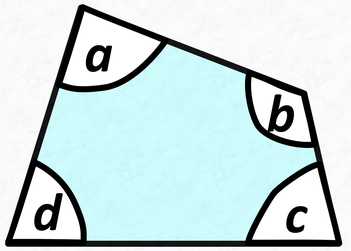
Angles in a Triangle



The three angles in a triangle will always add up to 180°

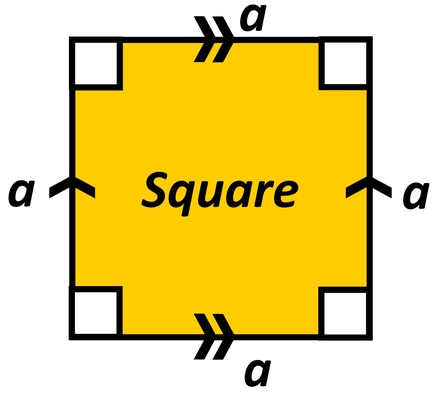
$a + b + c = 180°$

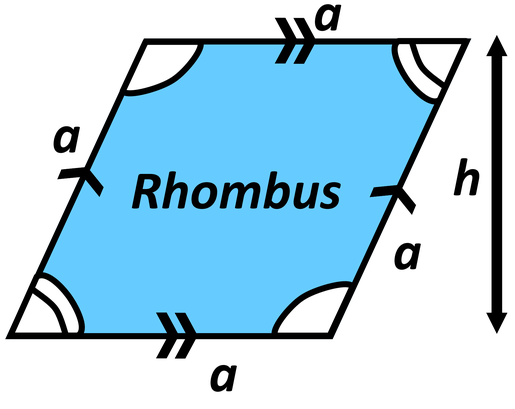
Angles in a Quadrilateral

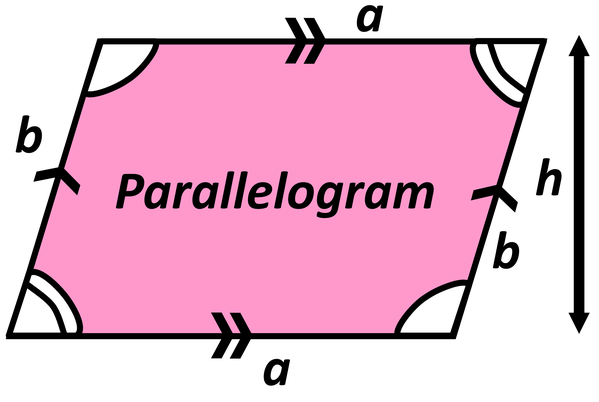


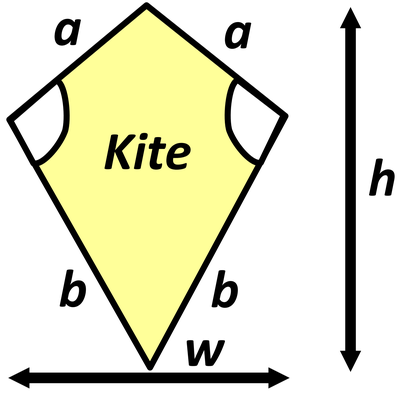
The four angles inside a quadrilateral will always add up to 360°

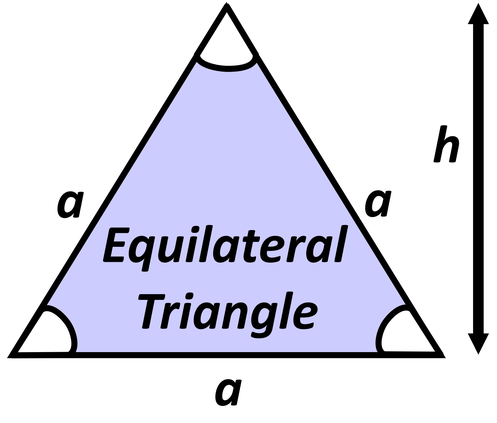
$a + b + c + d = 360°$

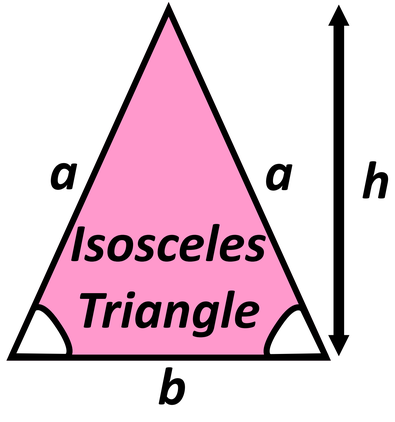

a
a
Square
a
a

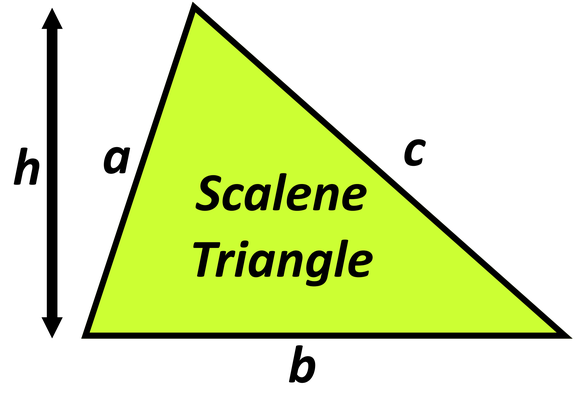

a
a
Rhombus
h
a
a

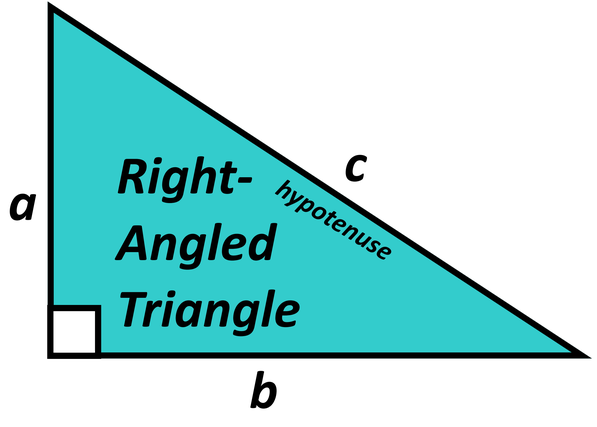

a
b
Parallelogram
h
b
a

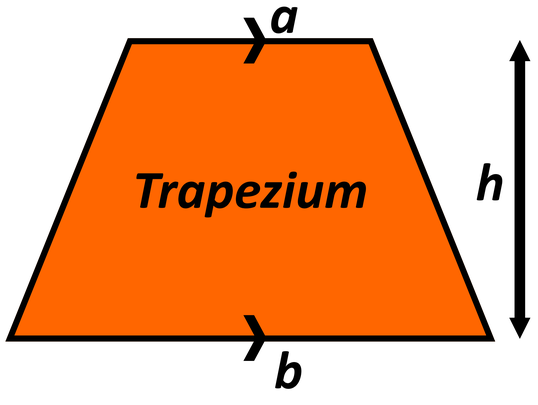

a
a
Kite
h
b
b
w


a
a
h
Equilateral
Triangle
a

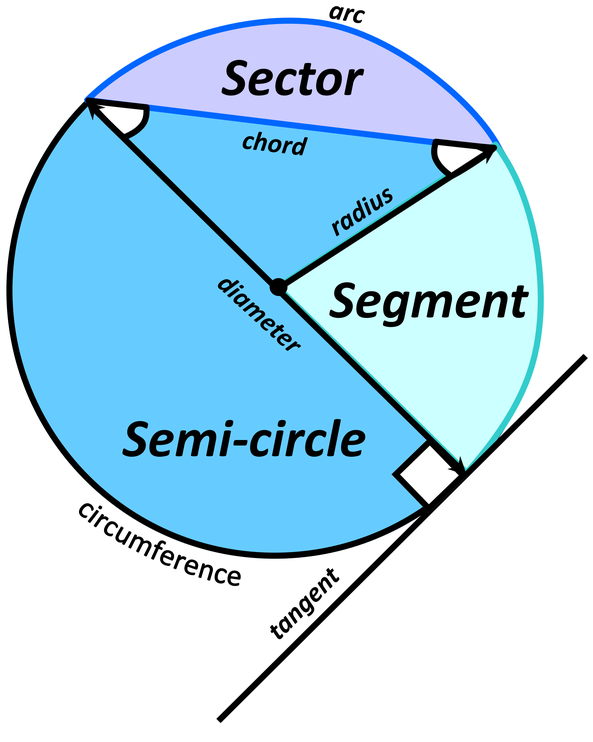

a
a
h
Isosceles
Triangle
b

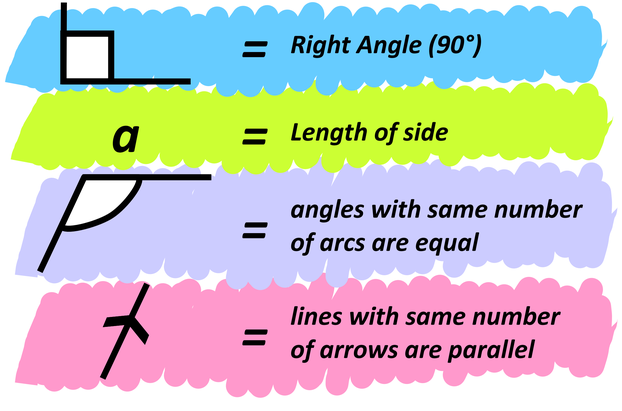

h
a
c
Scalene
Triangle
b


a
Right-
Angled
Triangle
c
hypotenuse
b


a
Trapezium
h
b

Circle


arc
Sector
chord
radius
diameter
Segment
Semi-circle
circumference
tangent


= Right Angle (90°)
a = Length of side
= angles with same number of arcs are equal
= lines with same number of arrows are parallel