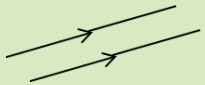
Maths

Year 7 | Term 5 | Trinity MAT

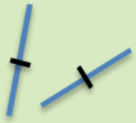
A

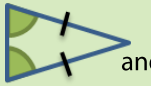
Lines are **parallel** if they have the **same gradient (slope)**. **Arrows** on two lines show that they are parallel to one another.



Lines are **perpendicular** if they **meet at right angles (90 degrees)** to one another. A **'box'** shows where an angle is 90 degrees.

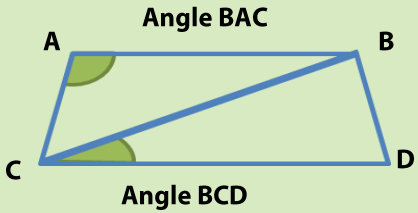
A **dash** through two lines shows that they have the **same length**





An **isosceles** triangle has two sides of equal length and two angles of equal size.

Angles are denoted by three letters from the vertices where the edges join.



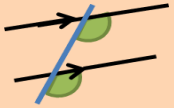
B

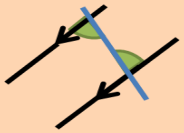
Angles that meet at a point on a straight line add to 180°

Angles that meet around a point add to 360°

C

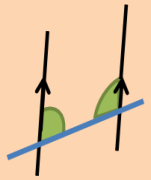
Corresponding angles are equal





Alternate angles are equal

Co-interior angles add up to 180 degrees



D

Polygon	Number of Sides	Sum of Interior Angles	Interior Angle for a regular polygon
Equilateral Triangle	3	180	60
Square	4	360	90
Pentagon	5	540	108
…	…	…	…
N sided regular polygon	n	(n – 2) x 180	$\frac{(n-2)\times 180}{n}$

Exterior angles in a polygon sum to 360°

Polygon - closed shape with straight edges

Equilateral – polygon with equal sides

Regular – polygon with equal sides and angles

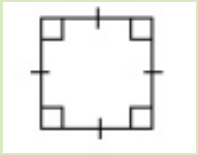
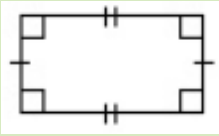
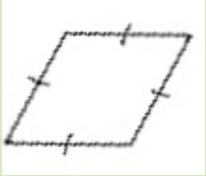
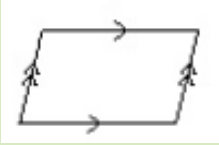
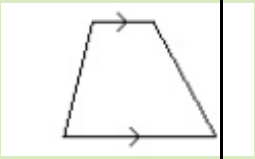
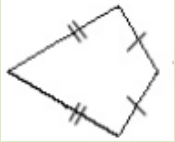
Times Tables

Times Tables

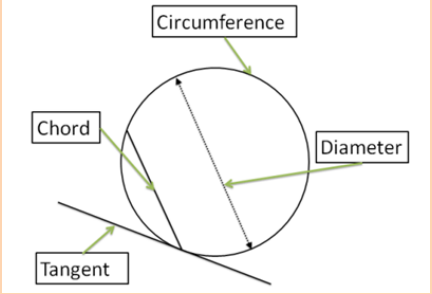
1 x 12 = 12
2 x 12 = 24
3 x 12 = 36
4 x 12 = 48
5 x 12 = 60
6 x 12 = 72
7 x 12 = 84
8 x 12 = 96
9 x 12 = 108
10 x 12 = 120
11 x 12 = 132
12 x 12 = 144

1 x 4c = 4c
2e x 4 = 8e
3 x 4d = 12d
4f x 4= 16f
5s x 4 = 20s
6 x 4s = 24s
7j x 4 = 28j
8 x 4u = 32u
9 x 4y =36y
10 x 4r = 40r
11r x 4 = 44r
12e x 4= 48e

E

Polygon	Shape	Properties
Square		Four sides of equal length Four equal angles (90˚) Two pairs of parallel sides Diagonals are equal and meet at right angles
Rectangle		Opposite sides have equal length Four equal angles Two pairs of parallel sides Diagonals are equal but do not meet at right angles
Rhombus		Four sides of equal length Opposite angles have equal size Two pairs of parallel sides Diagonals are not equal but do meet at right angles
Parallelogram		Opposite sides have equal length Opposite angles have equal size Two pairs of parallel sides Diagonals are not equal and do not meet at right angles
Trapezium		One pair of parallel sides Sides could all have different lengths Angles on one side add to 180˚
Kite		Two pairs of sides of equal length Diagonals are not equal but do meet at right angles

F Parts of a circle

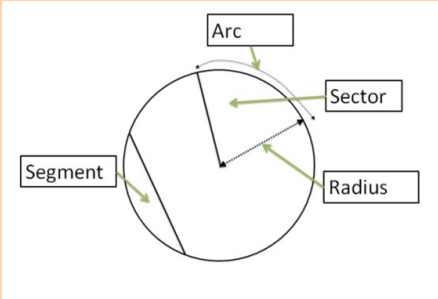


Circumference: Distance around the outside of a circle

Diameter: Straight line from one point on the circumference to another point on the circumference passing through the centre

Chord: Straight line from one point on the circumference to another point on the circumference

Tangent: A line that touches a curve at a point, matching the curve's slope



Arc: any unbroken part of the circumference of a circle or other curved line

Radius: Straight line from the centre of the circle to the circumference

Segment: Area between a chord and the circumference

Sector: Area between two radii and an connecting arc