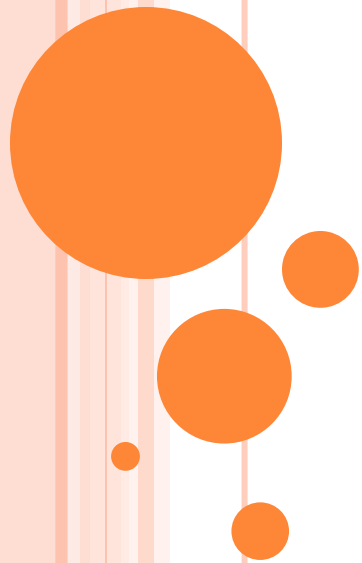
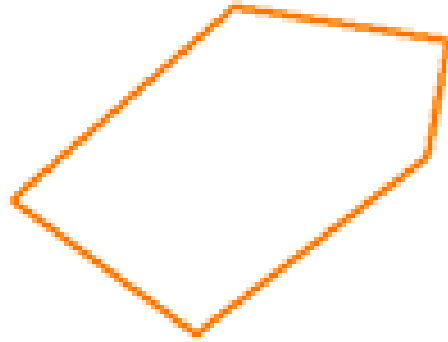


POLYGONS



WHAT IS A POLYGON?

A polygon is a plane shape with straight sides.

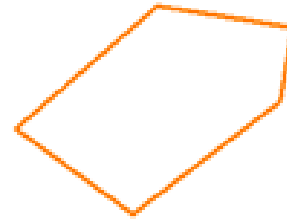
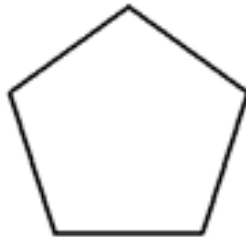


Polygon comes from Greek. **Poly-** means "many" and **-gon** means "angle".

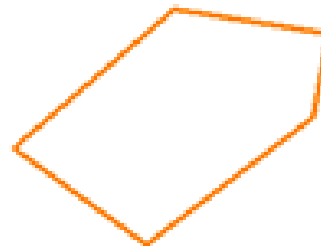
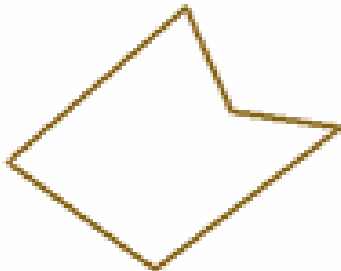


TYPES OF POLYGONS

- **Regular or Irregular** - If all angles are equal and all sides are equal, then it is **regular**, otherwise it is **irregular**











- **Concave or Convex** - If any internal angle is greater than 180° then the polygon is **concave**.



NAMES OF POLYGONS

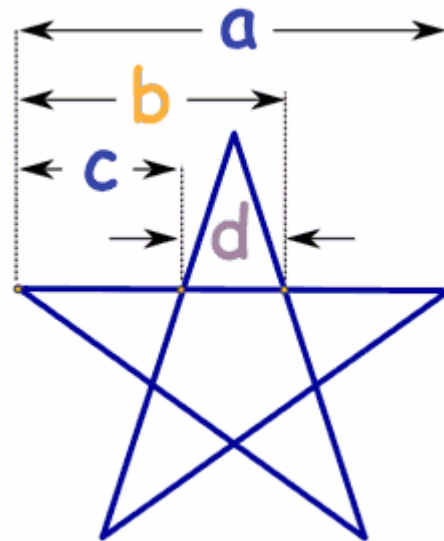
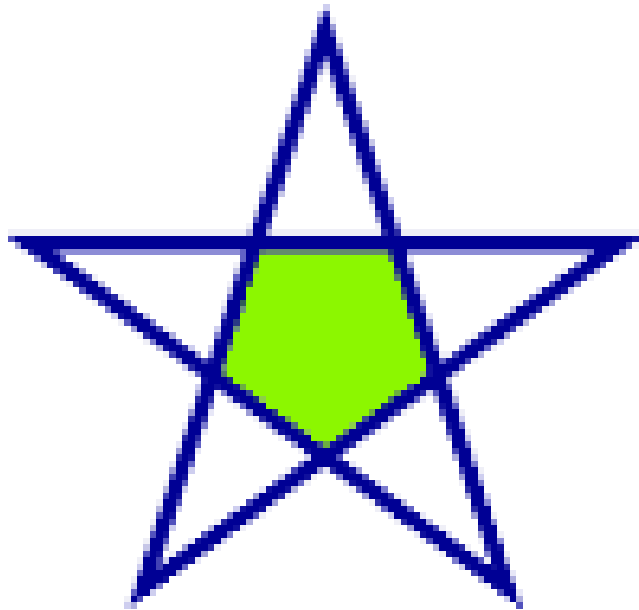
If it is a **Regular Polygon...**

Name	Sides	Shape	Interior Angle
Triangle	3		60°
Quadrilateral	4		90°
Pentagon	5		108°
Hexagon	6		120°
Heptagon	7		128.571°
Octagon	8		135°
Nonagon	9		140°
Decagon	10		144°



THE PENTAGRAM

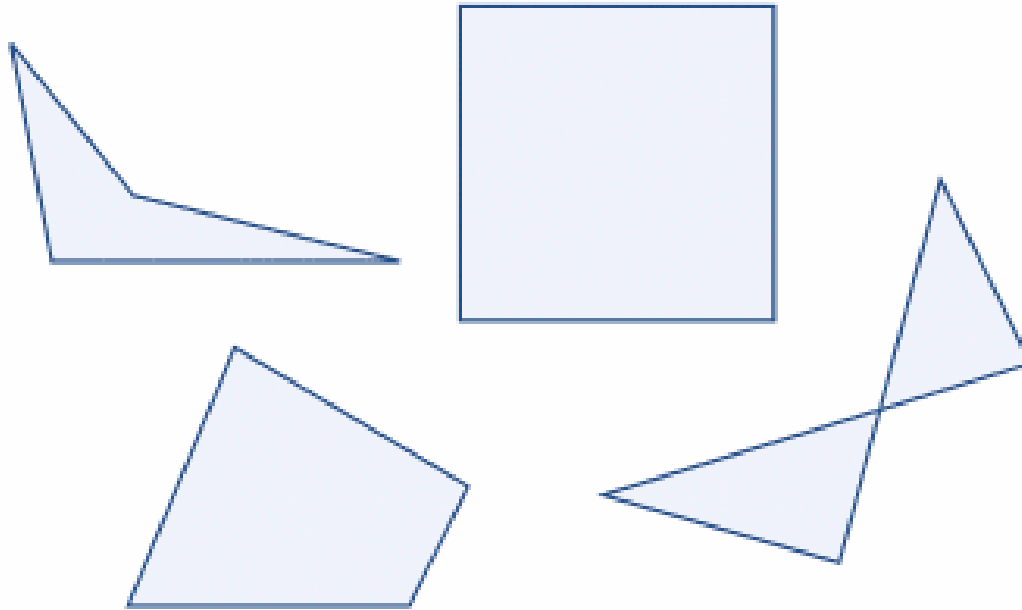
The Pentagram (or Pentangle) is a 5-pointed star. Inside a Pentagram is a Pentagon.



The pentagram has a special number hidden inside called the Golden Ratio, which equals approximately 1.618



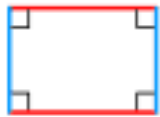
Any four-sided shape is a Quadrilateral.



TYPES OF QUADRILATERALS



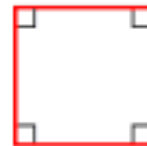
Parallelogram



Rectangle



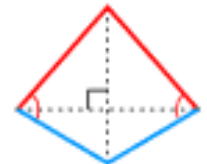
Rhombus



Square



Trapezoid (US)
Trapezium (UK)

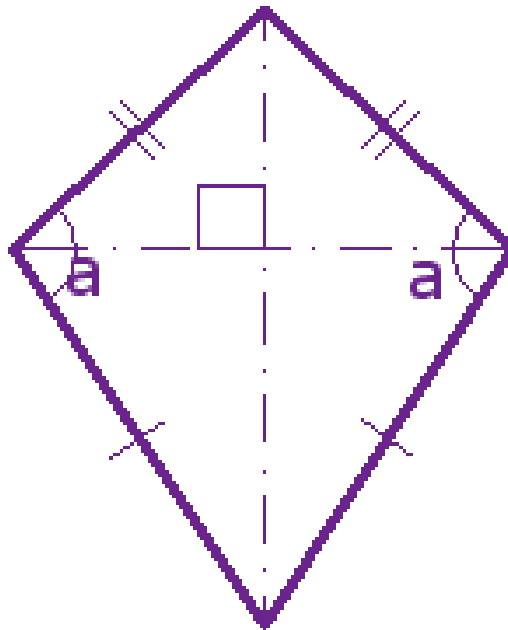


Kite

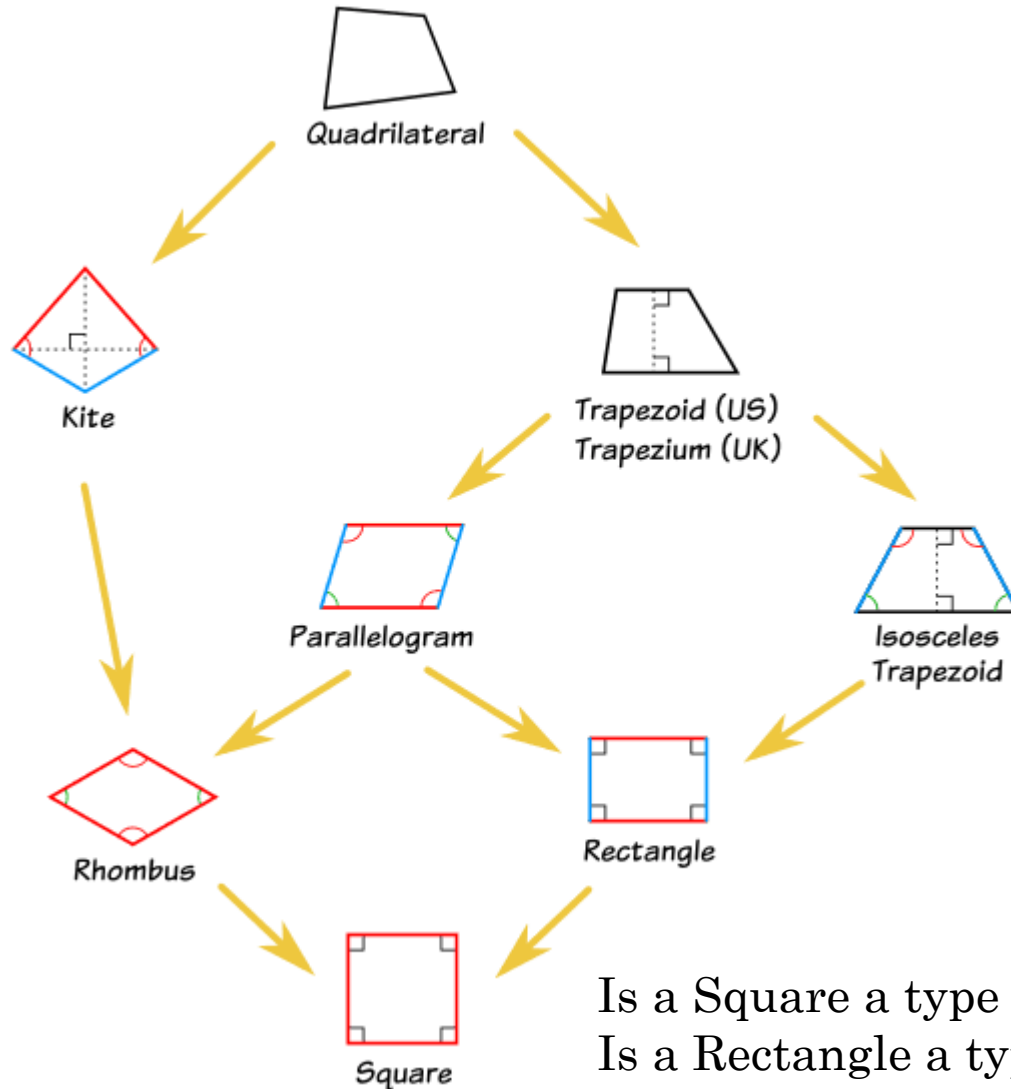


THE KITE

A Kite is a flat shape with straight sides.
It has 2 pairs of equal adjacent sides.



THE "FAMILY TREE" CHART



Is a Square a type of Rectangle?
Is a Rectangle a type of Kite?

