







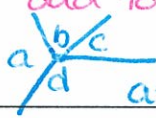



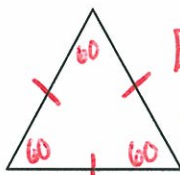
Angle Properties

θ "Theta" is symbol most commonly used for angles.

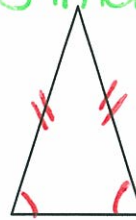
<p>Acute $0^\circ < \theta < 90^\circ$</p> 	<p>Right $\theta = 90^\circ$</p> 	<p>Complimentary 2 Angles add to 90°</p> 
<p>Obtuse $90^\circ < \theta < 180^\circ$</p> 	<p>Straight $\theta = 180^\circ$</p> 	<p>Supplementary 2 Angles add to 180°</p> 
<p>Angles on a line More than 2 Angles on line add to 180°</p>  <p>$a+b+c+d = 180^\circ$</p>	<p>Reflex $180^\circ < \theta < 360^\circ$</p> 	<p>Angles at a point Angles all meeting at a point add to 360°</p>  <p>$a+b+c+d = 360^\circ$</p>
<p>Vertically opposite angles opposite from each other at intersection. Angles are Equal</p> 		

Triangle Properties

For all Triangles the 3 interior angles add to 180° .



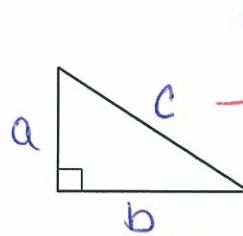
Equilateral Triangle
 - 3 equal sides
 - 3 equal angles (all 60°)



Isosceles Δ
 - 2 equal sides
 - 2 equal angles (opposite from the equal sides)



Scalene Δ
 - No Equal sides
 - No Equal Angles



Right Δ
 One Right Angle (90°)
 - Can use pythagoras

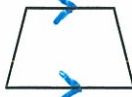
$a^2 + b^2 = c^2$
 Trigonometry (Sin, Cos, Tan)

→ 4 sides (all 4 interior angles add to 360°)

Quadrilateral Properties

→ → means parallel lines


Trapezoid



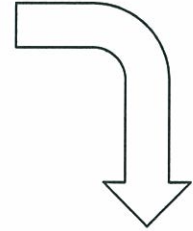
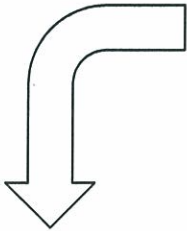
One set of parallel lines.



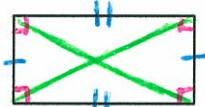
Parallelogram



- 2 sets of equal parallel lines
- Opposite Angles are equal
- Adjacent angles (next to each other) are supplementary.

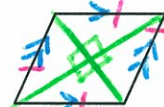


Rectangle

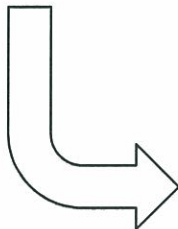


- All angles 90°
- 2 sets of equal/parallel lines
- Diagonals are equal
- Diagonals bisect each other (cut in half at intersection)

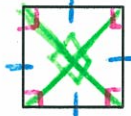
Rhombus



- 2 sets of parallel lines
- All 4 sides equal length.
- Diagonals bisect at 90° (cut in half & meet at 90°)



Square



- opposite sides parallel
- All sides equal
- 4 right angles
- diagonals bisect at 90° (cut in half & meet at 90°)

