
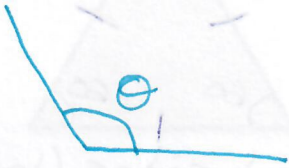

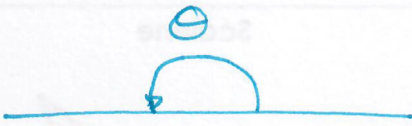
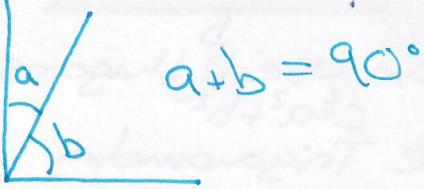
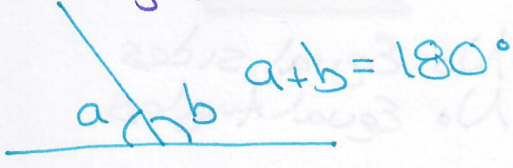

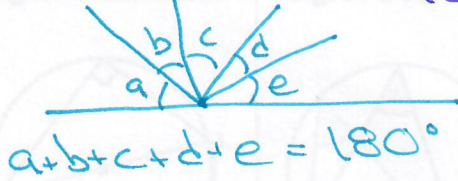
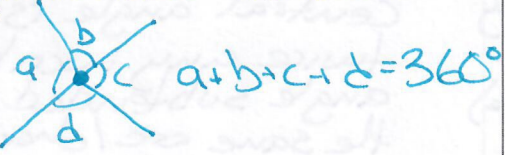





Lesson #2.0 - Geometry Overview

Angle Properties: θ "Theta" symbol commonly used to represent angles!

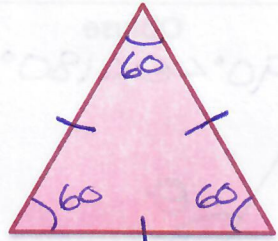
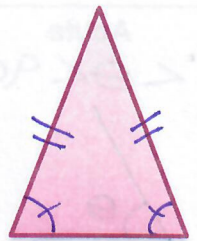
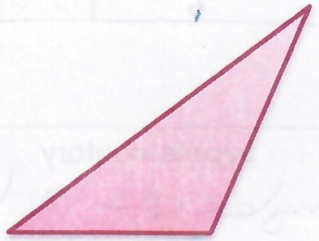
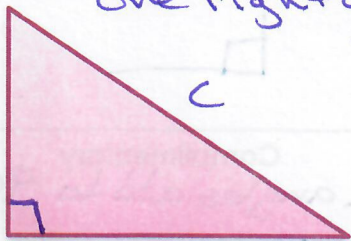
<p>Acute $0^\circ < \theta < 90^\circ$</p> 	<p>Obtuse $90^\circ < \theta < 180^\circ$</p> 
<p>Right $\theta = 90^\circ$</p> 	<p>Straight $\theta = 180^\circ$</p> 
<p>Complimentary 2 angles add to 90°</p> 	<p>Supplementary 2 angles add to 180°</p> 
<p>Reflex $180^\circ < \theta < 360^\circ$</p> 	<p>Angles on a Line More than 2 angles add to 180°</p> 
<p>Angles Around a Point Angles all meeting at a point add to 360°</p> 	<p>Opposite Angles Angles opposite of an intersection are equal.</p> 

FOUNDATIONS OF MATH 11
Chapter 2 - Geometry Overview

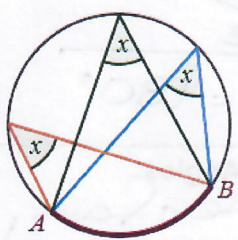
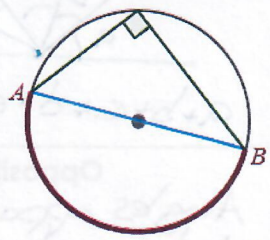
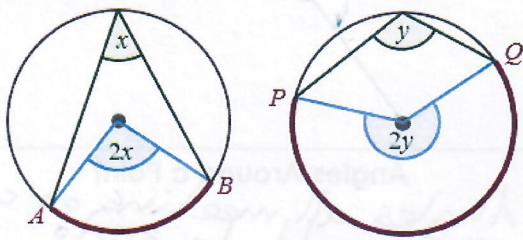


Properties of Triangles:

for All triangles the 3 interior angles add to 180°

<p style="text-align: center;">Equilateral</p>  <p>3 Equal sides (length) 3 Equal angles (60°)</p>	<p style="text-align: center;">Isosceles</p>  <p>2 Equal sides (length) 2 Equal angles (opposite from the equal sides)</p>
<p style="text-align: center;">Scalene</p>  <p>No Equal sides No Equal Angles</p>	<p style="text-align: center;">Right</p>  <p>one right angle (90°)</p> <p>can use Pythagoras $c^2 = a^2 + b^2$ use Trigonometry (Sin, Cos, Tan)</p>

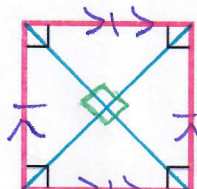
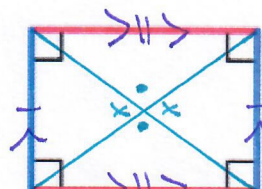
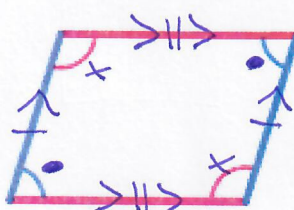
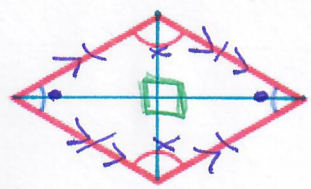
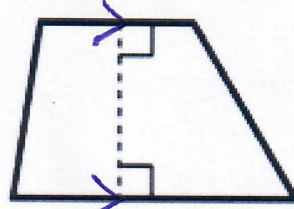
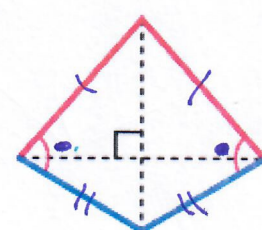
Properties of Circle:

<p style="text-align: center;">Inscribed Angle</p>  <p>subtended by same arc / chord are Equal.</p>	<p style="text-align: center;">Subtended Angles</p>  <p>Subtended by the diameter (or semi-circle) is 90°</p>	<p style="text-align: center;">Central Angle</p>  <p>Central angle is twice any inscribed angle subtended by the same arc / chord</p>
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FOUNDATIONS OF MATH 11
Chapter 2 - Geometry Overview



Properties of Quadrilaterals: 4 sides \Rightarrow all 4 interior angles add to 360°

<p style="text-align: center;">Square</p>  <p>opposite sides parallel 4 right angles 4 Equal sides Diagonals bisect at 90° (cut in half & meet at 90°)</p>	<p style="text-align: center;">Rectangle</p>  <p>2 sets of equal & parallel lines 4 right angles Diagonals are equal Diagonals bisect each other</p>
<p style="text-align: center;">Parallelogram</p>  <p>2 sets of parallel & equal lines opposite angles are equal adjacent angles (next to each other) are supplementary.</p>	<p style="text-align: center;">Rhombus</p>  <p>4 sides equal length 2 sets of parallel sides Diagonals Bisect at 90° opposite angles are equal</p>
<p style="text-align: center;">Trapezoid</p>  <p>one set of parallel lines</p>	<p style="text-align: center;">Kite</p>  <p>2 sets of equal lines Diagonals bisect at 90° 1 pair of equal angles No Parallel sides</p>