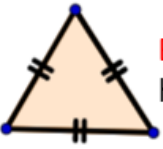
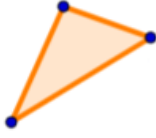
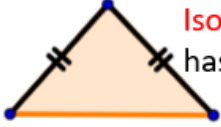

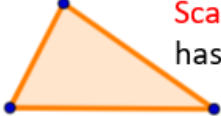



Course: MPM2D – Principles of Mathematics  
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Topics: Shapes and Properties.

Triangles Types and Properties:

### Types of Triangles

By Side	By Angle
 <p><b>Equilateral Triangle</b> has three equal sides</p>	 <p><b>Acute triangle</b> has three angles <math>&lt; 90^\circ</math></p>
 <p><b>Isosceles Triangle</b> has two equal sides</p>	 <p><b>Right triangle</b> has one angle <math>= 90^\circ</math></p>
 <p><b>Scalene Triangle</b> has no equal sides</p>	 <p><b>Obtuse triangle</b> has one angle <math>&gt; 90^\circ</math></p>

## Quadrilateral Types and Properties.

Type	Properties
Parallelogram 	<ul style="list-style-type: none"><li>• Opposite sides are equal and parallel</li><li>• Opposite angles are equal</li></ul>
Rectangle 	<ul style="list-style-type: none"><li>• Opposite sides are equal and parallel</li><li>• All angles are right angles (<math>90^\circ</math>)</li></ul>
Square 	<ul style="list-style-type: none"><li>• Opposite sides are parallel</li><li>• All sides are equal</li><li>• All angles are right angles (<math>90^\circ</math>)</li></ul>
Rhombus 	<ul style="list-style-type: none"><li>• Opposite sides are parallel</li><li>• All sides are equal</li><li>• Opposite angles are equal</li><li>• Diagonals bisect each other at right angles (<math>90^\circ</math>)</li></ul>
Trapezoid 	<ul style="list-style-type: none"><li>• One pair of opposite sides is parallel</li></ul>
Kite 	<ul style="list-style-type: none"><li>• Two pairs of adjacent sides are equal</li><li>• One pair of opposite sides are equal</li><li>• One diagonal bisects the other</li><li>• Diagonals intersect at right angle (<math>90^\circ</math>)</li></ul>

**Trapezoid**



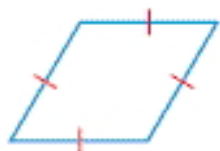
A **trapezoid** is a quadrilateral with exactly 1 pair of parallel sides.

**Parallelogram**



A **parallelogram** is a quadrilateral with both pairs of opposite sides parallel.

**Rhombus**



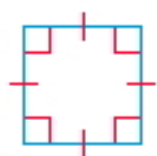
A **rhombus** is a parallelogram with 4 sides of equal length.

**Rectangle**



A **rectangle** is a parallelogram with 4 right angles.

**Square**



A **square** is a parallelogram with 4 sides of equal length and 4 right angles.