

M9

Similar Triangles – Part 1

6.4

Geometry Terms and Symbols

Symbol	Meaning
	Similar = same shape and different size. Similar = corresponding angles are the same size and corresponding sides are scaled by the same SF.
	Congruent = same shape and same size. Congruent = corresponding angles are the same and corresponding sides are the same.
	Parallel = never intersecting and with the same slope.
	Perpendicular = meeting or intersecting at 90° angle.

Vertical Angles

- Vertical angles are formed when two lines intersect.
- Vertical angles are always congruent.
- Vertical angles share a vertex (a point) but nothing else.

Sum of All Interior Angles in a Triangle drawn in 2D is always _____

Supplementary Angles = 2 angles that add up to _____

Complementary Angles = 2 angles that add up to _____

Angle	Diagram	Property
Right		
Straight		
Acute		
Obtuse		
Reflex		

Congruent Triangles

- Congruent triangles have the same shape and the same size
- **You can determine if given triangles are congruent by in 3 different ways.** The way you use depends on the information known about the triangles.

	Known Information	Example
SSS	side-side-side 3 pairs of corresponding sides are the same size	
ASA	angle-side-angle 2 pairs of corresponding angles and 1 pair of corresponding sides are congruent	
SAS	side-angle-side 1 pair of corresponding angles and 2 pairs of corresponding sides are congruent	

