Warm-up

-"Rip" off the signature/student info page of your syllabus and keep on desk

Undefined Terms of Geometry

Point

- Represents a location in space.
- Has no length, no width, no thickness.
- Symbolized as a dot.
- Named with a capital letter.

. A

Line

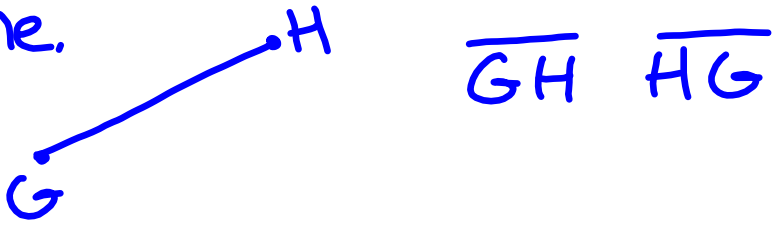
- Has no thickness.
- Represents an infinite set of points extending in opposite directions.
- Named using 2 points on the line.

Plane

- Represents an infinite flat surface.
- Has no thickness.
- Named using 3 letters on the plane

Segment

The part of a line between 2 pts on the line.

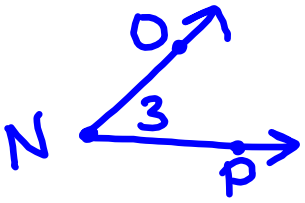


Ray

The part of a line that begins at a point and extends infinitely in one direction.

Angle

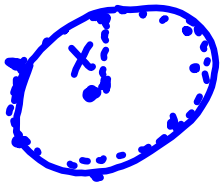
A figure formed by 2 rays that share a common endpoint.



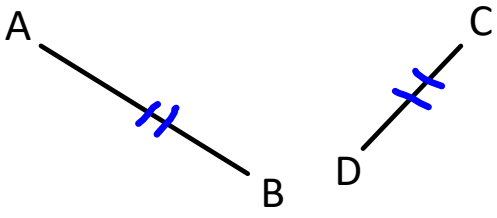
$\angle ONP$
$\angle PNO$
$\angle N$ $\angle 3$

Circle

The set of all points in a plane that are equidistant from a given point.

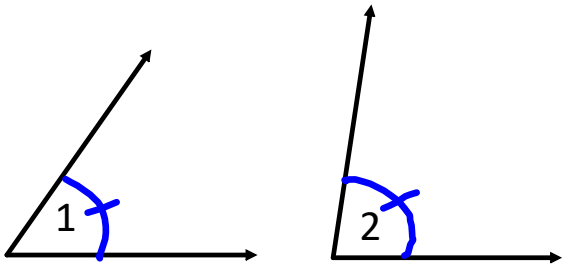


Two figures are CONGRUENT if they have the same shape, size, and measure.



$\overline{AB} \cong \overline{CD}$

$AB = CD$



$\angle 1 \cong \angle 2$

$m\angle 1 = m\angle 2$

Given: $\triangle ABC \cong \triangle XYZ$

Corresponding Sides:

$\overline{BC} \cong \overline{YZ}$

$\overline{AB} \cong \overline{XY}$

$\overline{AC} \cong \overline{XZ}$

Corresponding Angles:

$\angle A \cong \angle X$

$\angle B \cong \angle Y$

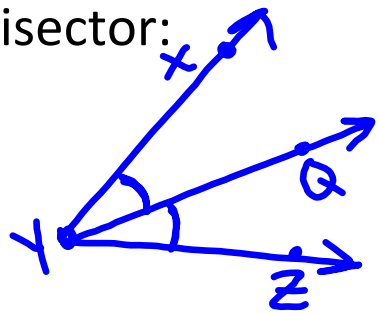
$\angle C \cong \angle Z$

A point, segment, ray, or line that divides a figure into two congruent parts BISECTS that figure.

Segment Bisector:

$\overline{AC} \cong \overline{BC}$

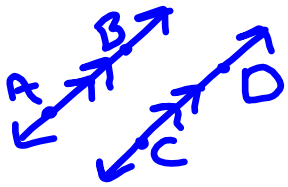
Angle Bisector:



$\overrightarrow{YQ}$ is a bisector of $\angle XYZ$.

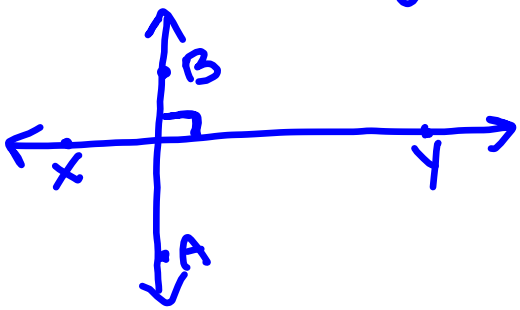
$\therefore \angle XYQ \cong \angle ZYQ$

Two lines are PARALLEL if they lie in the same plane and do not intersect.



$\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$

Two lines are PERPENDICULAR if they intersect to form 4 right angles.



$\overleftrightarrow{AB} \perp \overleftrightarrow{XY}$