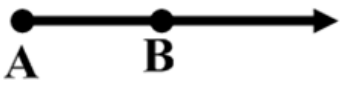
Def. Ray

A part of a line with EXACTLY 1 endpt. that extends infinitely in 1 direction.

The symbol for ray is $\overrightarrow{\quad}$

To name a ray, you use 2 pts. (the first pt. is ALWAYS the endpt. the other pt. is any other pt on the ray) with the symbol for ray above them.



Def. Opposite rays (straight ∠)

2 rays that share a common endpt. but go in EXACT opposite directions.
Opposite rays form a line.

Def. Angle

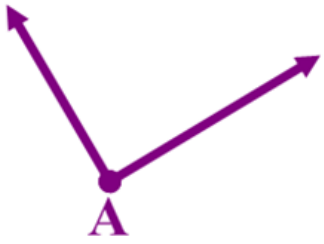
2 rays, called the SIDES, that share a common endpt., called the VERTEX.

The symbol for angle is ∠

To name an ∠, you have 3 options:

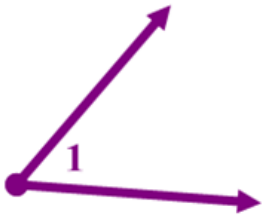
1. You can use the symbol for angle followed by the vertex pt.

ex.



2. You can assign a number to the angle, then use the symbol followed by the number.

ex.

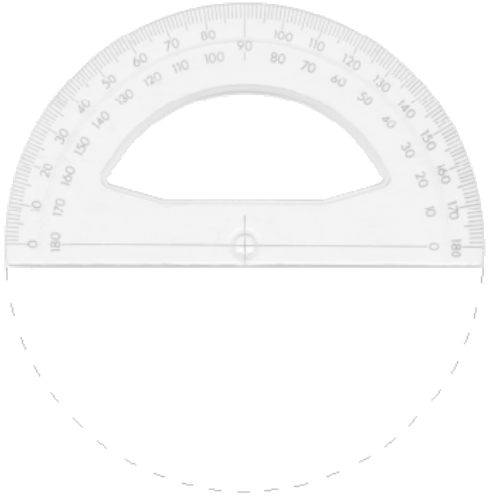


3. You can use the symbol for angle followed by 3 pts. 1 point from each ray (side) and the vertex point, where the vertex pt. is ALWAYS the middle pt.

ex.

Measuring Angles

∠'s are measured in units called DEGREES between 0 and 180 that determine how far apart (wide) the 2 sides are.



The symbol for the measurement of an ∠ is $m\angle$

Def. Acute ∠, Right ∠, Obtuse ∠

An acute ∠ has a measure that is less than 90°

A right ∠ has a measure that is EXACTLY 90°

An obtuse ∠ has a measure that is greater than 90°

Def. of ≅ angles

Two angles are ≅ if and only if their measurements are equal.

Def. ∠ bisector

A ray that divides an angle into 2 ≅ angles.