

Def. Ray

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

The symbol for ray is $\longrightarrow$

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 $\angle$)

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 $\angle$

To name an $\angle$, you have 3 options:

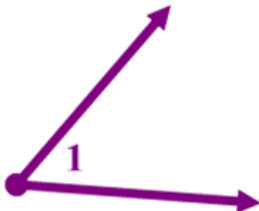
1. You can use the symbol for angle followed by the vertex pt.

ex.



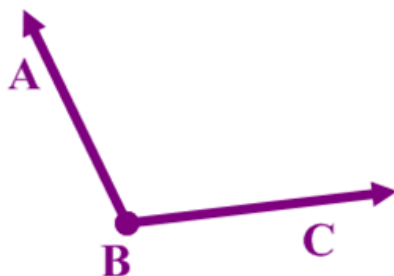
2. You can assign a number to the angle, then use the symbol followed by the number.

ex.



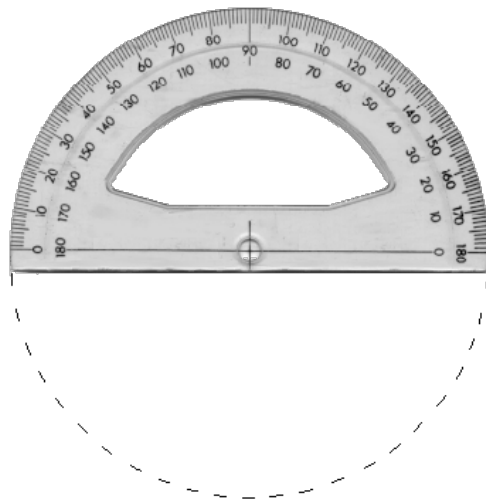
3. You can use the symbol for angle followed by 3 pts. 1 point from each ray (side) and the vertex point, where the vertex pt. is **ALWAYS** the middle pt.

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*∠

Def. Acute $\angle$, Right $\angle$, Obtuse $\angle$

An acute $\angle$ has a measure that is less than 90°

A right $\angle$ has a measure that is EXACTLY 90°

An obtuse $\angle$ has a measure that is greater than 90°

Def. of $\cong$ angles

Two angles are $\cong$ if and only if their measurements are equal.

Def. $\angle$ bisector

A ray that divides an angle into 2 $\cong$ angles.