

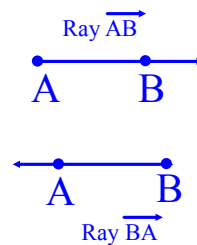
1 - 4

Angle Measure

Terminology

Ray

- Part of a line.
- Has one endpoint and extends indefinitely in one direction



Labeling

- Two upper case letters, with a ray above (end point must align)

Opposite Rays

- Two rays that have a common end point but extend in opposite directions (forms a line)

Ray \overrightarrow{AC} and ray \overrightarrow{AB} are opposite rays

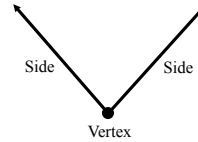


Terminology

Angle

- Two rays(sides) that have a common endpoint (vertex)

* All angles will be greater than 0 degrees and less than or equal to 180 degrees.



Labeling (3 ways)

1) Use the vertex only (can only be done when there is ONLY one angle at the vertex)

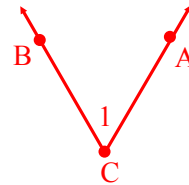
$\angle C$

2) Use the number on the interior of the angle.

$\angle 1$

3) Use the sides and vertex

$\angle BCA$ or $\angle ACB$

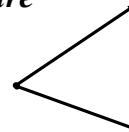


Terminology

4 ways to classify an angle by its measure

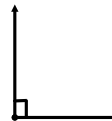
Acute Angle

- An angle whose degree measure is less than 90 degrees but greater than 0 degrees.



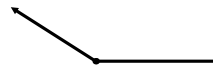
Right Angle

- An angle whose degree measure is equal to 90 degrees



Obtuse Angle

- An angle whose degree measure is greater than 90 degrees but less than 180 degrees.



Straight Angle

- An angle whose degree measure is equal to 180 degrees (Straight line, Opposite Rays)

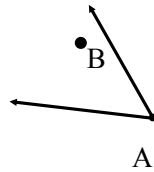


Terminology

Interior vs. Exterior

Interior Point(s)

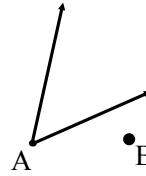
- A point located "inside" an angle, between the two sides



Point B is located on the interior of angle A

Exterior Point(s)

- A point located "outside" an angle, not between the two sides

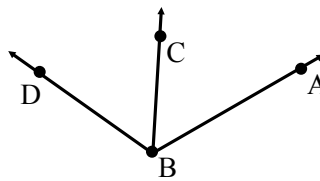


Point B is located on the exterior of angle A

Terminology

Angle Bisector

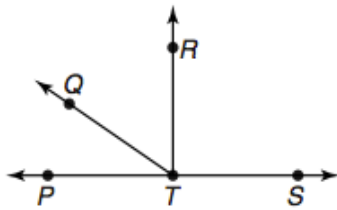
- a ray that divides an angle into two smaller congruent angles.



** Point C is located in the interior of $\angle DBA$*

** Ray \overrightarrow{BC} was formed and bisects angle $\angle DBA$*

** $\angle DBC$ and $\angle CBA$ were formed and are congruent*



If $m\angle RTS = 8x + 18$, find x so that $\overrightarrow{TR} \perp \overrightarrow{TS}$.

If $m\angle PTQ = 3y - 10$ and $m\angle QTR = y$, find y so that $\angle PTR$ is a right angle.

Determine whether each statement can be assumed from the figure. Explain.

$\angle WZU$ is a right angle.

$\angle YZU$ and $\angle UZV$ are supplementary.

$\angle VZU$ is adjacent to $\angle YZX$.

