9/19/2011

1-4 Angle Measure

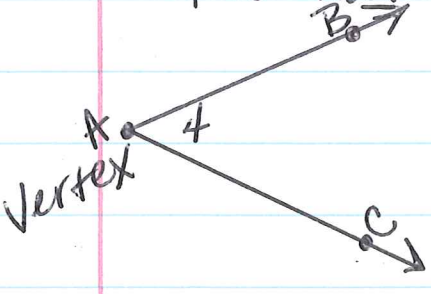
ray = a part of a line; has one endpoint and extends indefinitely in one direction.

ray EF, $\overrightarrow{EF}$
ray EG, $\overrightarrow{EG}$

Rays are named by their endpoint and any other point on the ray (Endpoint is <u>always</u> 1st)

Opposite rays = two rays in opposite directions that form a line, such as $\overrightarrow{BC}$ and $\overrightarrow{BA}$

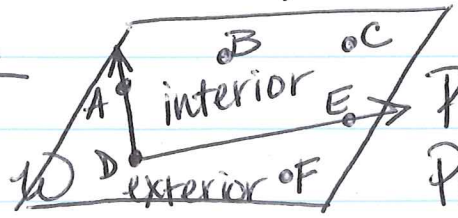
angle = formed by two noncollinear rays that have a common endpoint.



The sides are rays.
ex: $\overrightarrow{AB}$ and $\overrightarrow{AC}$
The common endpoint is called the <u>vertex</u>.

names: ∠A, ∠BAC, ∠CAB, ∠4

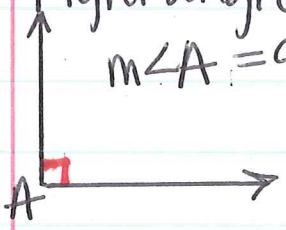
ex:



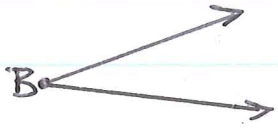
Points A, D & E lie on the angle.
Points B & C lie in the <u>interior</u>.
Point F lies in the <u>exterior</u>

degree = unit of measure of an angle
$1° = \frac{1}{360}$ of a circle
There are 360 degrees in a circle.

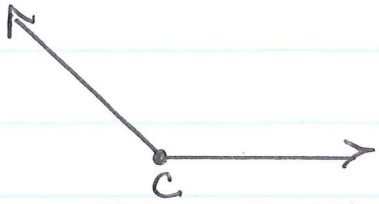
right angle
$m\angle A = 90$



acute angle
$m\angle B < 90$



obtuse angles
$90 < m\angle C < 180$

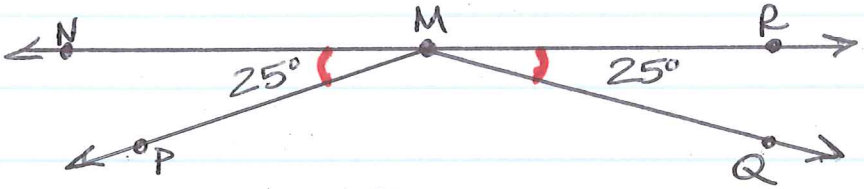


straight angle

$m\angle D = 180$

congruent angles = angles w/ the same measure

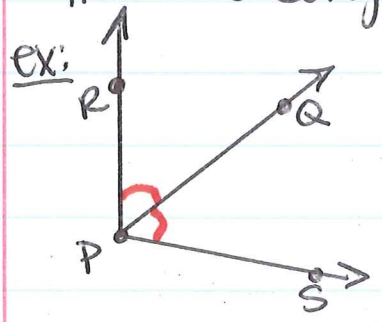
Ex:



$\angle NMP \cong \angle QMR$

bisect = split into two congruent parts
angle bisector = a ray that divides an angle into two congruent angles.

Ex:



$\overrightarrow{PQ}$ is the angle bisector of $\angle RPS$.

$\angle RPQ \cong \angle QPS$

$m\angle RPQ + m\angle QPS = m\angle RPS$

Try p. 36 Q#7 → draw your picture!