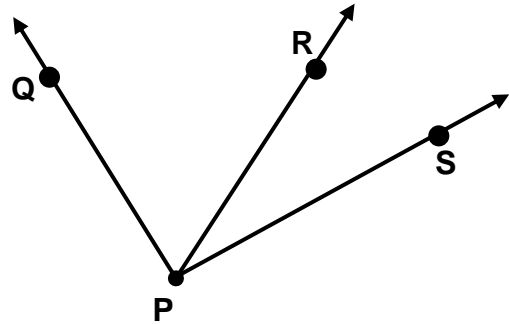


TOPIC 2-4: Angle Addition & Angle Bisector

ANGLE ADDITION POSTULATE:

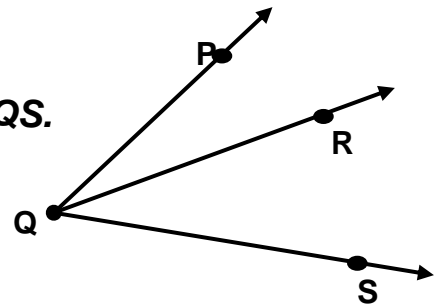
If $\angle QPR$ and $\angle RPS$ are adjacent angles,
then $m\angle QPR + m\angle RPS = m\angle QPS$

Part + Part = Whole



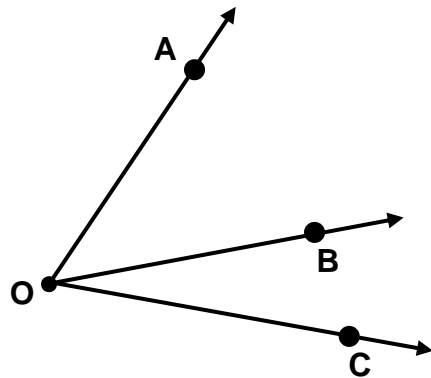
PRACTICE 1

If $m\angle PQS = 77^\circ$ and $m\angle PQR = 32^\circ$, then find $m\angle RQS$.



PRACTICE 2

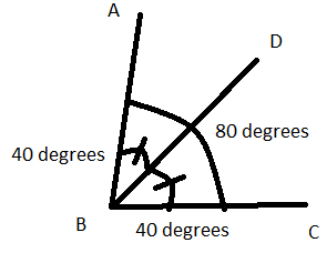
If $m\angle AOC = 70^\circ$, $m\angle AOB = (x + 10)^\circ$, and $m\angle BOC = x^\circ$, find $m\angle BOC$



Equal measure means congruent angles:

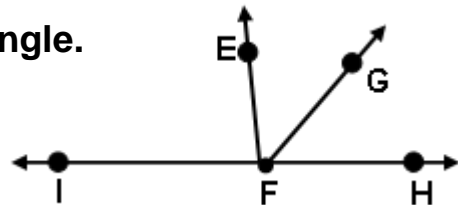
If $m\angle 1 = m\angle 2$, then $\angle 1 \cong \angle 2$

(note symbols used)

TERM	DEFINITION	SKETCH
<p>Angle Bisector</p>	<p>A line, ray, or segment that divides an angle into 2 _____ angles.</p>	

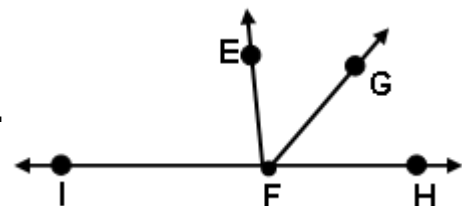
PRACTICE 3

\overrightarrow{FG} bisects $\angle EFH$ and $\angle IFH$ is a straight angle.
 If $m\angle EFG = 50^\circ$, find $m\angle GFH$.



What other angle measures can you find?
 Use the image to the right for Practice 4 & 5.

\overrightarrow{FG} bisects $\angle EFH$ and $\angle IFH$ is a straight angle.



PRACTICE 4

If $m\angle EFG = (5x - 10)^\circ$ and $m\angle GFH = (3x + 25)^\circ$, find $m\angle HFE$.

PRACTICE 5

If $m\angle GFH = (3x + 20)^\circ$ and $m\angle EFH = (4x + 80)^\circ$, find $m\angle EFG$.