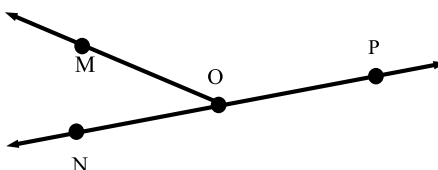




Vocabulary



Linear pair: pair of adjacent angles whose noncommon sides are opposite rays. The angles of a linear pair form a straight angle.



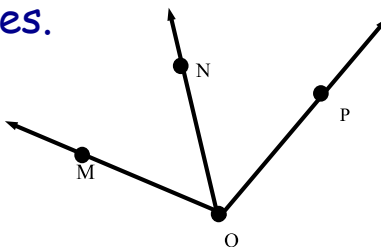
Examples: $\angle NOP$ and $\angle MOP$



Vocabulary



Angle bisector: a ray that divides an angle into two congruent angles.

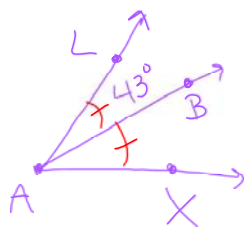


Examples: \overrightarrow{ON} is the angle bisector
So $\angle MON \cong \angle PON$

Week 4 Block Day Notes

Example

\overline{AB} bisects $\angle LAX$. The $m\angle LAB = 43^\circ$. Find $m\angle LAX$

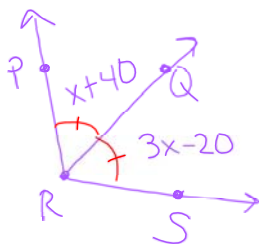


$$43^\circ + 43^\circ = \boxed{86^\circ}$$

Example

\overline{RQ} bisects $\angle PRS$. The $m\angle PRQ = (x + 40)^\circ$ and

$m\angle QRS = (3x - 20)^\circ$. Find $m\angle PRS$



$$\angle PRQ \cong \angle QRS$$

$$x + 40 = 3x - 20$$

$$-x \quad -x$$

$$40 = 2x - 20$$

$$+20 \quad +20$$

$$\frac{60}{2} = \frac{2x}{2}$$

$$30 = x$$

$$m\angle PRQ = 30 + 40 = 70$$

$$m\angle QRS = 3(30) - 20$$
$$= 90 - 20 = 70$$

$$\text{So, } m\angle PRS = 70 + 70$$

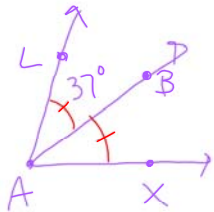
$$\boxed{140^\circ}$$

Week 4 Block Day Notes



\overline{AB} bisects $\angle LAX$. The $m\angle LAB = 37^\circ$. Find $m\angle LAX$

Numeric



$$m\angle LAX = 37 + 37 = 74^\circ$$

