

Speak Like A Mathematician:

angle:

vertex:

sides of an angle:

Protractor Postulate

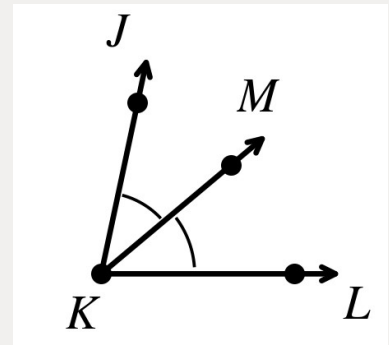
The measure of an angle is usually given in _____. Given a line and a point on that line, every ray from that point can be assigned a unique number between _____ and _____.

congruent angles:

angle bisector:

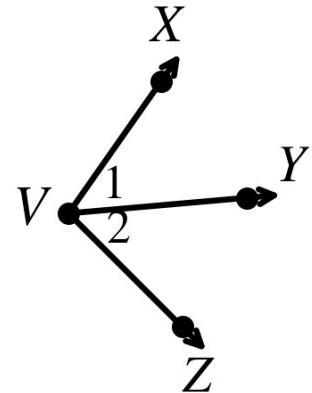
Angle Addition Postulate

If M is in the interior of $\angle JKL$, then
 $m\angle JKM + m\angle \underline{\hspace{1cm}} = m\angle \underline{\hspace{1cm}}$.



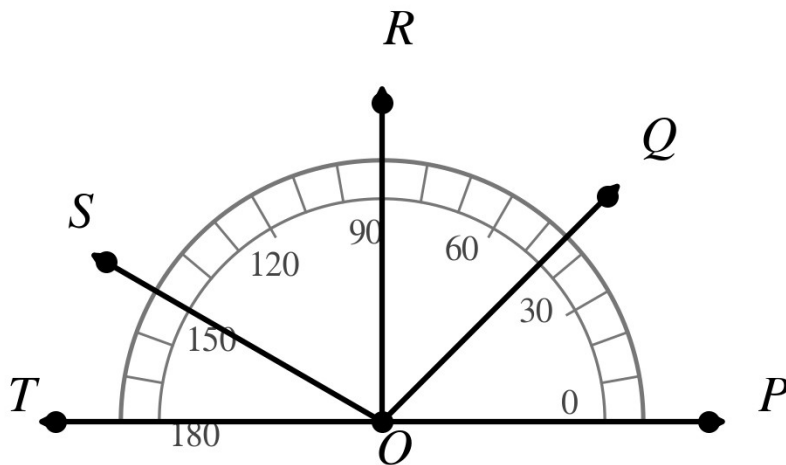
Example 1 - Name That Angle

Write the different ways you can name each angle in the diagram.



Example 2 - Measure and Classify

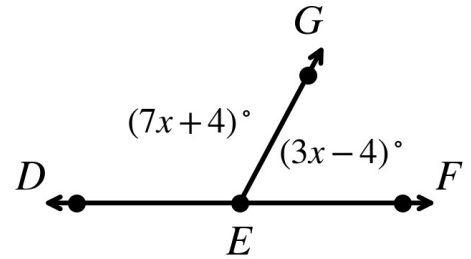
Use the protractor diagram to find the measure of each angle. Then classify each as acute, right, or obtuse.



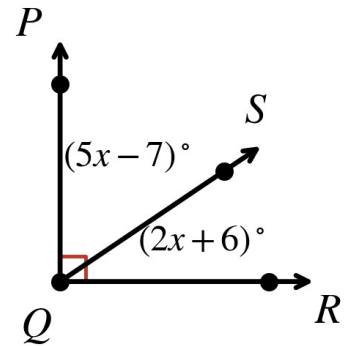
- a) $\angle QOP$
- b) $\angle ROP$
- c) $\angle SOQ$
- d) $\angle TOS$

Example 3 - Find the Indicated Angle Measures

a) $\angle DEF$ is a straight angle. Find $m\angle DEG$ and $m\angle GEF$.



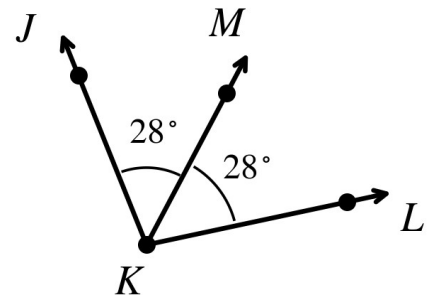
b) $\angle PQR$ is a right angle. Find $m\angle PQS$ and $m\angle SQR$.



Example 4 - Fill in the Blanks

Use the image.

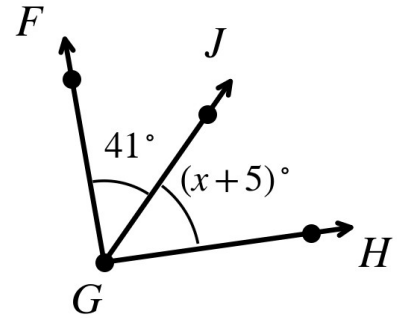
_____ bisects _____ because $\angle JKM$ _____ $\angle MKL$.



Example 5 - Find the Value of x

Ray $\overrightarrow{GJ}$ bisects $\angle FGH$.

a) Find x .



b) Find x .

Example 6 - Bisector Algebra

Ray $\overrightarrow{NV}$ bisects $\angle MNP$. $m\angle MNV = (6y - 3)^\circ$ and $m\angle MNP = (10y + 8)^\circ$. Find $m\angle MNV$.

