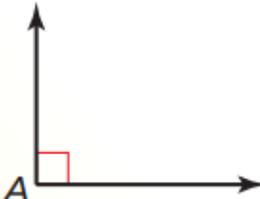
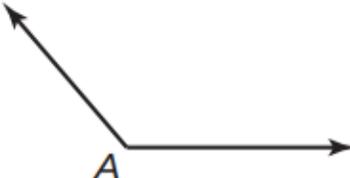
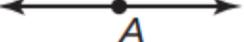


Classifying Angles:

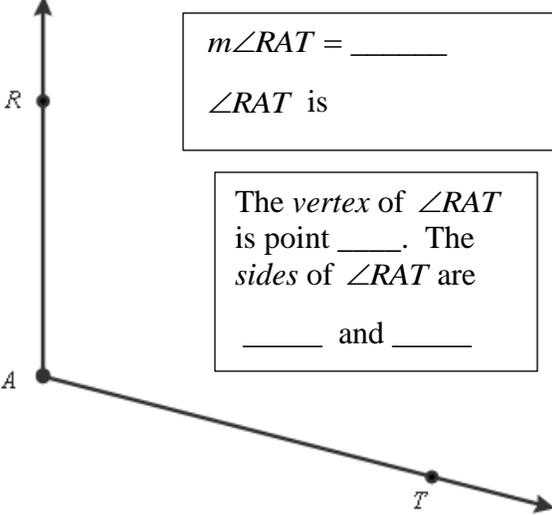
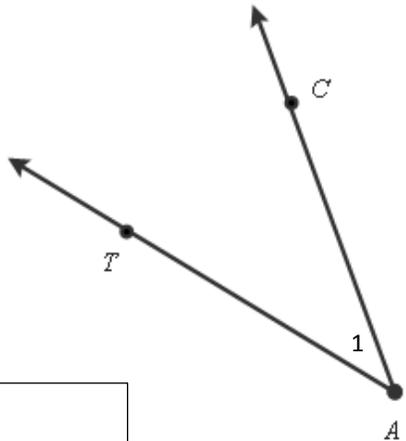
			
Measures greater than 0° and less than 90°	Measures 90°	Measures greater than 90° and less than 180°	Measures 180°

Measuring Angles:

To measure an angle:

- Place the center of the protractor at the vertex of the angle.
- Position the protractor so that one ray passes through 0° .
- Find the degree marking of the intersection of the other ray. There is a double scale, so make sure that if the angle is acute, use the value less than 90° and if the angle is obtuse, use the value that is greater than 90° .

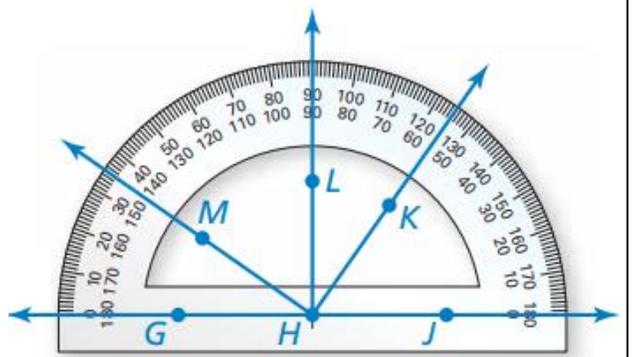
Measure and classify each angle.

<p>Ex 1:</p>  <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> $m\angle RAT = \underline{\hspace{2cm}}$ $\angle RAT$ is _____ </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> The vertex of $\angle RAT$ is point _____. The sides of $\angle RAT$ are _____ and _____. </div>	<p>Ex 2:</p>  <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> Name $\angle CAT$ three other ways: _____ _____ _____ </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> $m\angle CAT = \underline{\hspace{2cm}}$ $\angle CAT$ is _____. </div>
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Ex 3:

- $m\angle GHK = \underline{\hspace{2cm}}^\circ$, $\angle GHK$ is _____.
- $m\angle JHL = \underline{\hspace{2cm}}^\circ$, $\angle JHL$ is _____.
- $m\angle LHK = \underline{\hspace{2cm}}^\circ$, $\angle LHK$ is _____.
- $m\angle MHK = \underline{\hspace{2cm}}^\circ$, $\angle MHK$ is _____.
- $m\angle GHJ = \underline{\hspace{2cm}}^\circ$, $\angle GHJ$ is _____.

* \overline{HG} and \overline{HJ} are _____ rays. Opposite rays form _____ angles which measure $\underline{\hspace{2cm}}^\circ$.

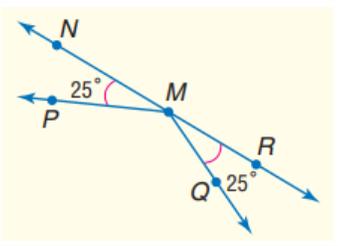


True or False: If two acute angles are combined to form a new the angle, the angle is always obtuse.

Equality versus Congruence: Use the figures to make correct statements:

Numbers or Values (like angle measures) use the “is **equal to**” symbol. “ $=$ ”

Figures or Shapes (like angles) use the “is **congruent to**” symbol. “ \cong ”

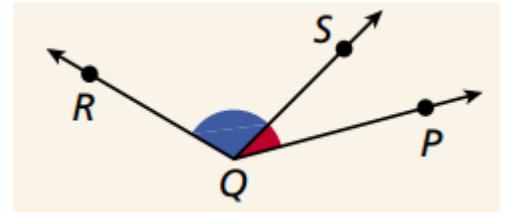


Definition: Congruent Angles - Two angles are congruent if and only if they have the same measure.

If $m\angle RAT = m\angle PIG$ then _____. If $\angle RAT \cong \angle PIG$ then _____.

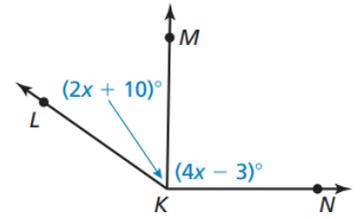
Postulate: Angle Addition Postulate (What’s a postulate?)

If S is in the interior of $\angle PQR$, then $m\angle PQS + m\angle SQR =$ _____



Example 1:

Given that $m\angle LKN = 145^\circ$, find $m\angle LKM$ and $m\angle MKN$.

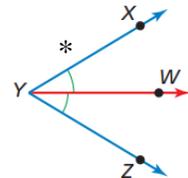


$x =$ $m\angle LKM =$
 $m\angle MKN =$

Definition: Angle Bisector – A ray bisects an angle if and only if it divides an angle into two congruent angles.

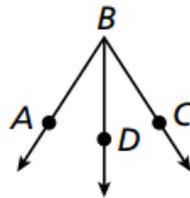
If \overrightarrow{YW} bisects $\angle XYZ$ then _____.

*Note that the arcs in the diagram indicate congruent angles.



Example 2:

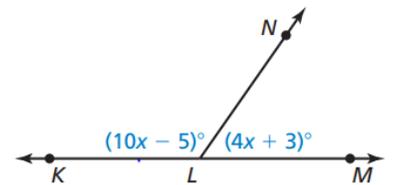
\overrightarrow{BD} bisects $\angle ABC$, $m\angle ABD = (6x + 3)^\circ$, and $m\angle DBC = (8x - 7)^\circ$. Find $m\angle ABD$.



$x =$ $m\angle ABD =$

Example 3:

Given that $\angle KLM$ is a straight angle, find $m\angle KLN$ and $m\angle NLM$.



$x =$ $m\angle KLN =$
 $m\angle NLM =$