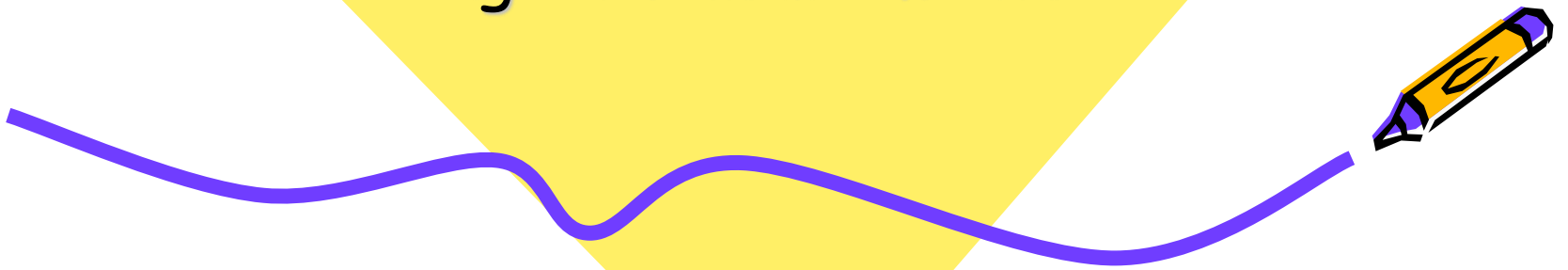


Geometry

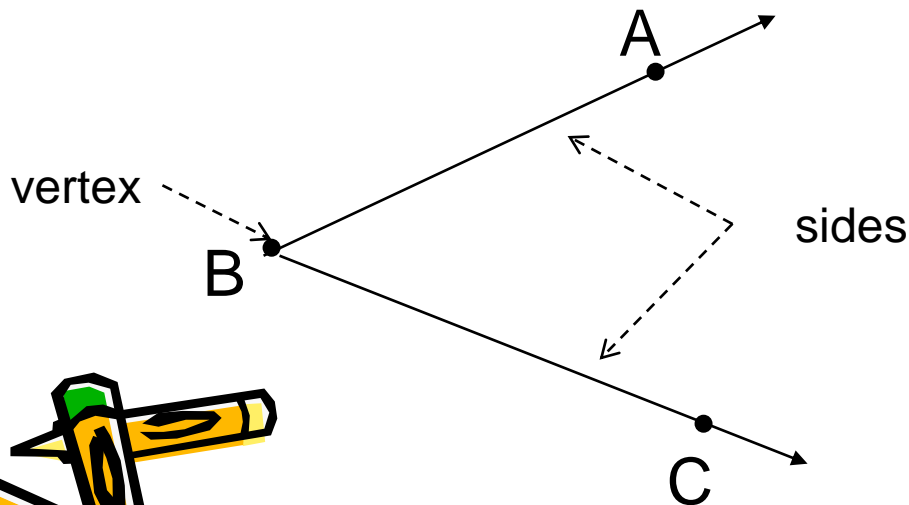
Angle Measurements



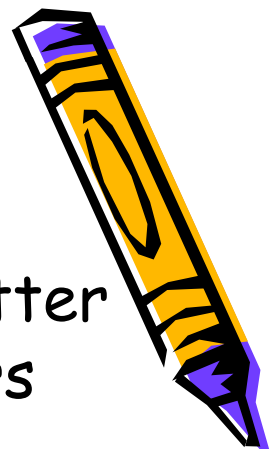
Naming Angles

You name angles with three letters. The middle letter is the vertex of the angle and the other two letters are on the edges of the angle.

You can name an angle with one letter (the vertex) if there is only one angle coming from the vertex.

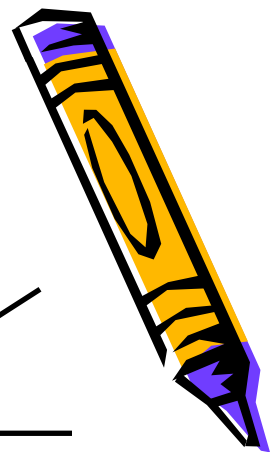
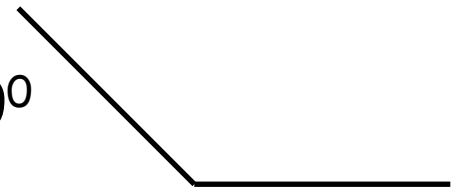
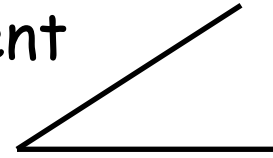


- $\angle ABC$
- $\angle CBA$
- $\angle B$



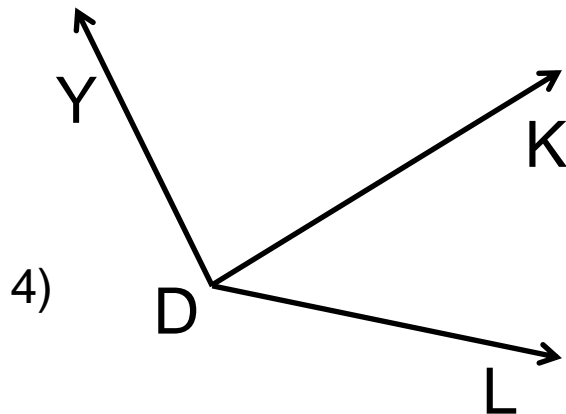
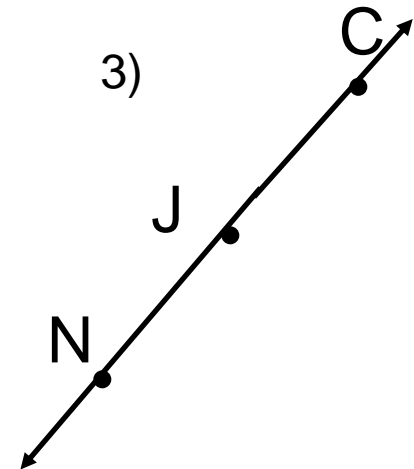
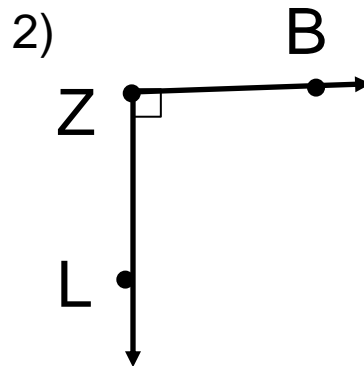
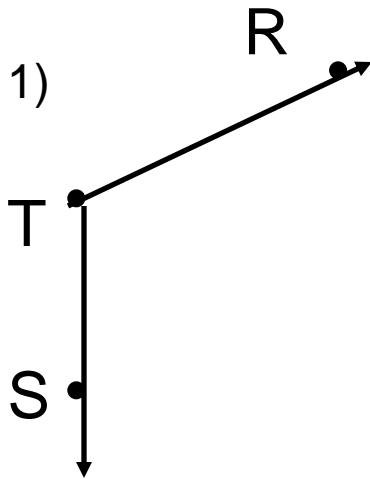
Classify Angles

- Acute Angle: an angle whose measurement is between 0 and 90° (degrees)
- Right Angle: an angle whose measurement is 90°
- Obtuse Angle: an angle whose measurement is between 90° and 180°
- Straight Angle: an angle whose measurement is 180°



Naming Angles

Name and Classify the following angles

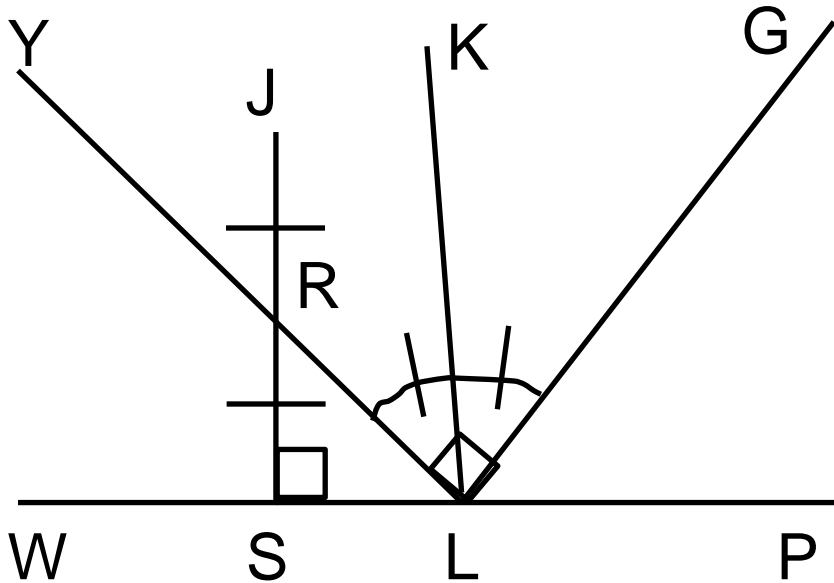


Naming Angles



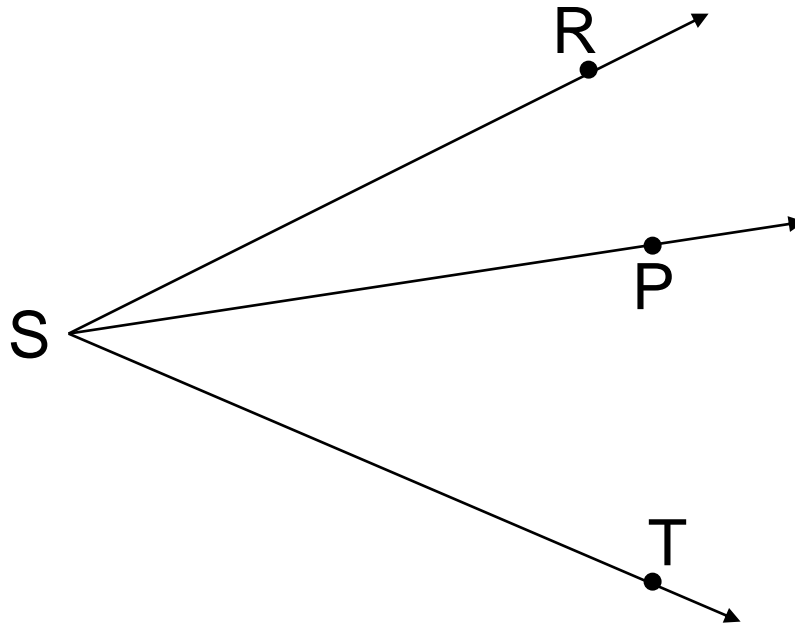
Name...

1. Right angle
2. Obtuse angle
3. Acute angle
4. Straight angle
5. Classify $\angle WLG$
6. Classify $\angle JSP$
7. Classify $\angle PLG$



Angle Addition Postulate

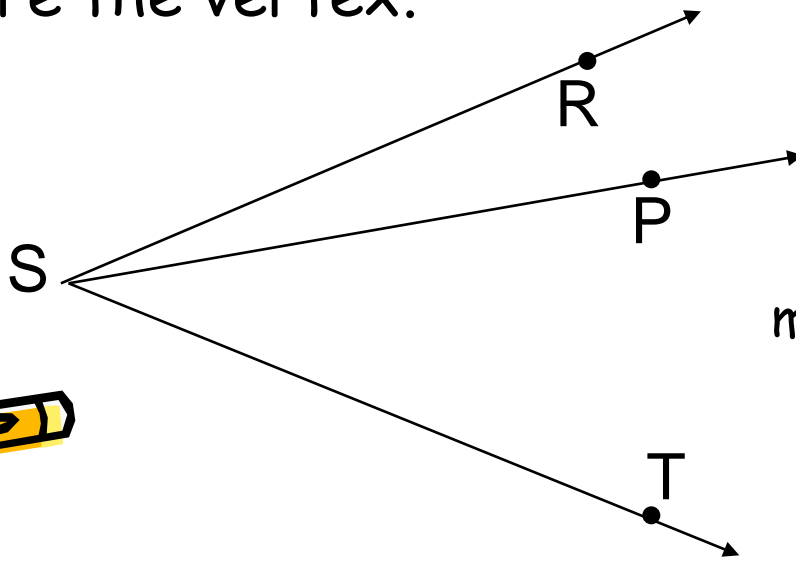
If P is in the interior of $\angle RST$, then
 $m\angle RSP + m\angle PST = m\angle RST$



Angle Addition Postulate



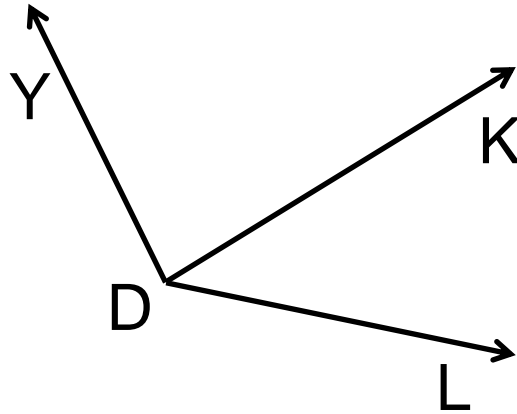
- We can use the Angle Addition Postulate if the two angles being added are adjacent.
- Adjacent Angles share no interior points. They share a vertex and one common side. They are next to each other with no gaps and no overlap, and share the vertex.



$$m\angle RSP + m\angle PST = m\angle RST$$



Angle Addition Postulate

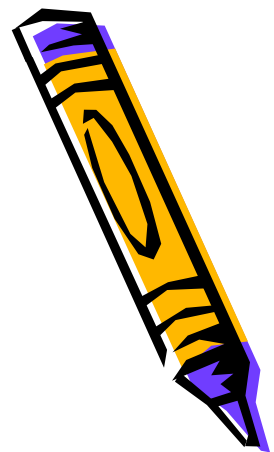
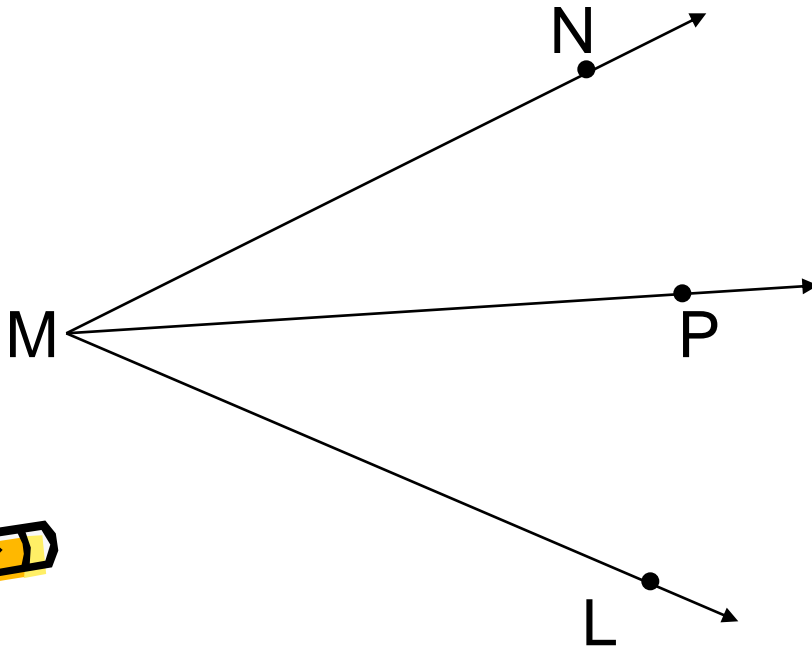


1. $m\angle YDK = 35$, $m\angle KDL = 90$. Find $m\angle YDL$
2. $m\angle YDK = 35$, $m\angle YDL = 60$. Find $m\angle KDL$
3. $m\angle YDK = 2x + 5$, $m\angle KDL = 5x - 10$.
 $m\angle YDL = 4x + 28$. Find $m\angle KDL$

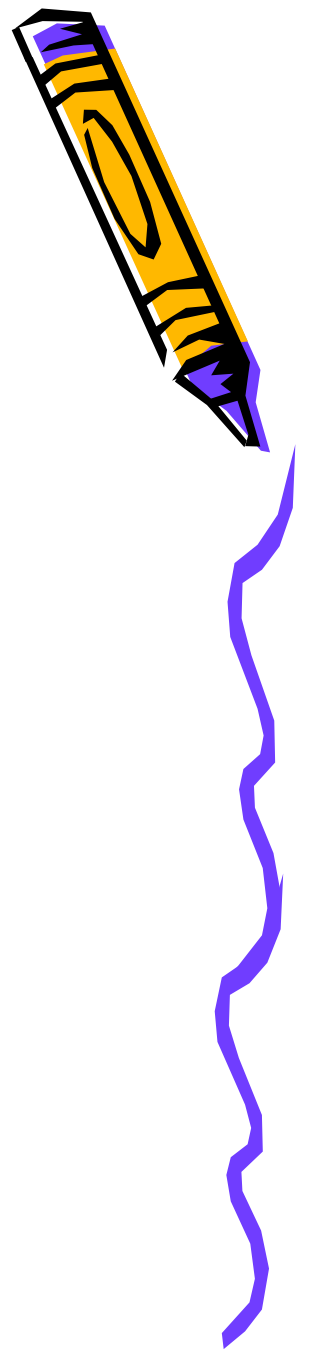


Angle Bisector

If \overrightarrow{MP} is an angle bisector of $\angle NML$, then $\angle NMP \cong \angle PML$ and $m\angle NMP = m\angle PML$



Angle Bisector



\overline{BR} bisects $\angle LRM$.

$$m\angle LRB = 3x + 4, m\angle MRB = 8x - 21.$$

Find $m\angle LRM$

