

**GEOMETRY
HONORS
CLASS NOTES**

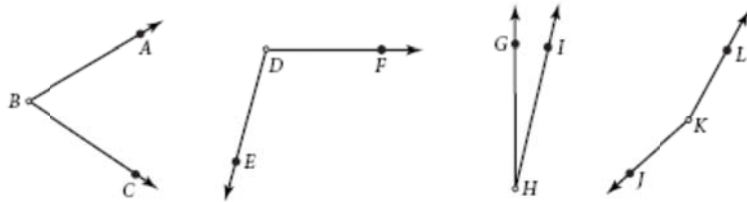
Name: _____

Section: 1.3 Period: _____ Date: _____

Key Question: _____

Questions/
Main Ideas:

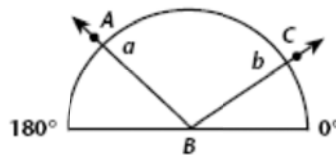
Warm-up:



1. Order the angles from largest to smallest. _____

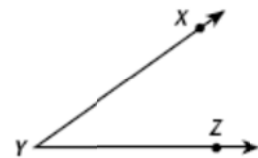
Notes:

- A _____ is a type of geometry ruler used to find the measure of an angle.
- If the vertex of $\angle ABC$ is placed at the center point of a protractor and \overrightarrow{BA} and \overrightarrow{BC} intersect the protractor at a and b , respectively, then the measure of $\angle ABC$, written $m\angle ABC$, is $|a - b|$ or $|b - a|$.

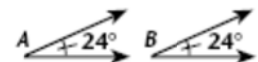


Example 1

Use a protractor to find the measure of $\angle XYZ$.



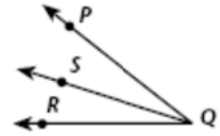
- **The _____ Postulate:** If two angles have the same measure, then they are congruent. If two angles are congruent, then they have the same measure.



- In the figure at the right, $m\angle A = m\angle B$, so $\angle A$ and $\angle B$ are congruent. This may be written $\angle A \cong \angle B$. The “tick marks” indicate that the angles are congruent.

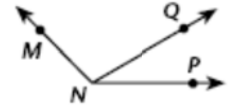
- The _____ **Postulate:**

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

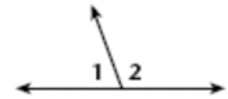


Example 2

In the figure, $m\angle MNQ = 104^\circ$ and $m\angle QNP = 31^\circ$.
 Find $m\angle MNP$.

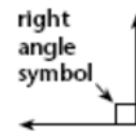


- Two angles are _____ if the sum of their measures is 90° . Each is called a _____ of the other.
- Two angles are _____ if the sum of their measures is 180° . Each is called a _____ of the other.
- If the endpoint of a ray is on a line so that two angles are formed, the angles are called a **linear pair**.
- In the figure, $\angle 1$ and $\angle 2$ form a _____ pair.
 By the _____ **Property**, the angles in a linear pair are supplementary.



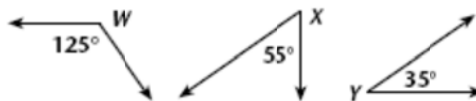
Angles may be classified according to their measures.

- A _____ **angle** has measure 90° .
- An _____ **angle** has measure between 0° and 90° .
- An _____ **angle** has measure between 90° and 180° .



Example 3

Identify any pairs of complementary angles or supplementary angles.



Summary: _____
