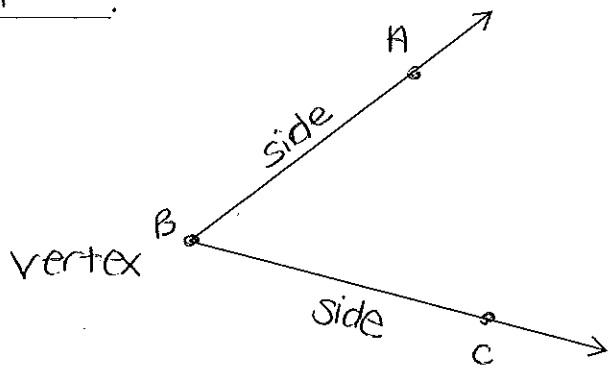
Geometry Name Key

Section 1.6: Angles and Their Measures Date _____

An angle is the figure formed by two rays that share the same endpoint.

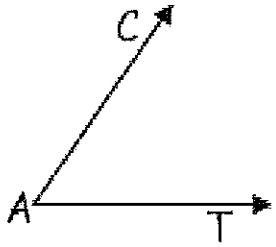



vertex → point B

sides → rays $\overrightarrow{BA}$ & $\overrightarrow{BC}$

Naming Angles:

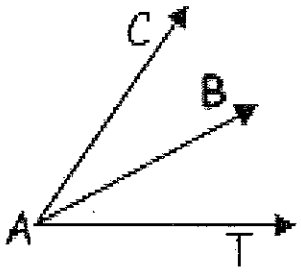
- use < symbol
- use 3 letters
- use 1 letter when appropriate




Acceptable: ∠CAT & ∠TAC & ∠A

Unacceptable: ∠ACT & ∠ATC

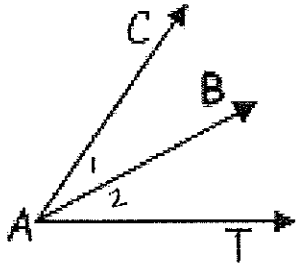
*Caution!*




* sometimes only using one letter is not specific enough
* when in doubt, use 3 letters

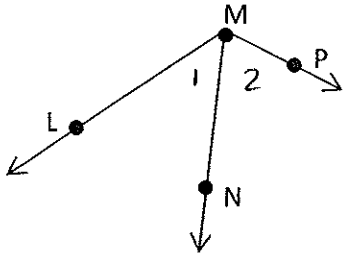
∠CAT, ∠CAB, ∠BAT

*Easier ways to name angles:*




∠CAT
∠1
∠2

Example:
Name the angles in the figure.



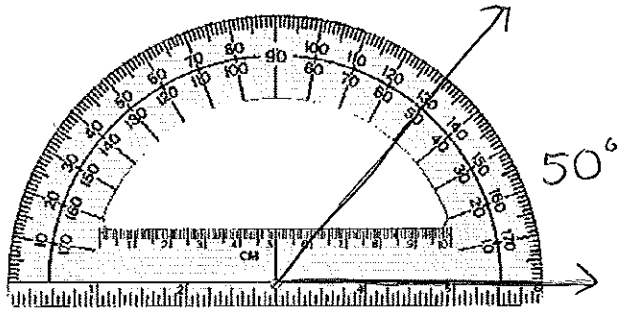

∠LMP
∠LMN or ∠1
∠PMN or ∠2

Measuring Angles:

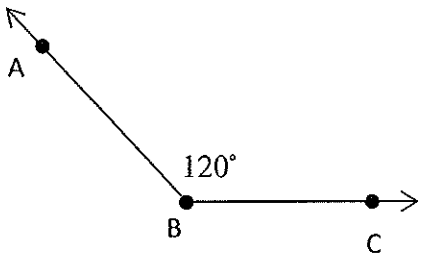
Angles are measured in units called degrees. Ex: 45°

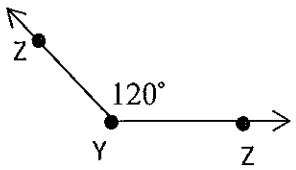
The measure of $\angle A$ is written as $m\angle A$

Angles are measured using a protractor.




congruent angles have the same measure.



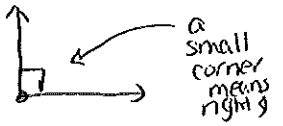
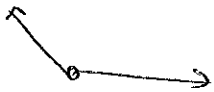
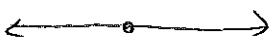

$\angle ABC \cong \angle XYZ$

* angles (figures) are congruent

$m\angle ABC = m\angle XYZ$

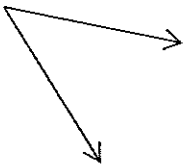
* measures (numbers) are equal

Classifying Angles:

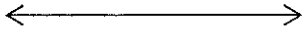
| | | |
|---|---|---|
| acute |  | measure is between 0° and 90° |
| right |   | measure is 90° |
| obtuse |  | measure is between 90° and 180° |
| straight |  | measure is 180° |

**Homework:**

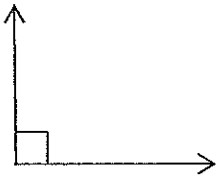
Classify each angle as acute, obtuse, right, or straight.

1. 

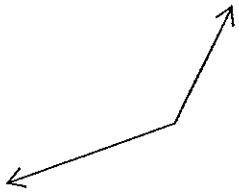
Acute

2. 

Straight

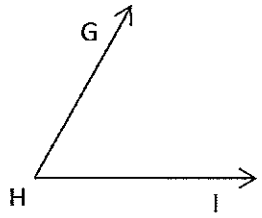
3. 

right

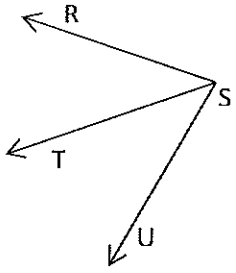
4. 

obtuse

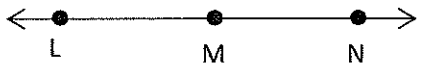
Name each angle.

5. 


∡GHI or
∡IHG

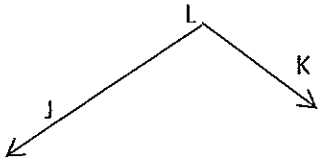
6. 


∡RST, ∡TSU,
∡RSU

7. 


∡LMN or
∡NML

8. Name the sides and the vertex of the given angle.




vertex: point L
sides: $\overrightarrow{LJ}$ and $\overrightarrow{LK}$