








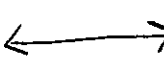




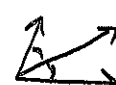
Quick Geometry Vocabulary Review

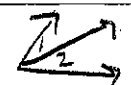
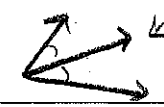

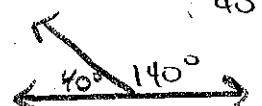
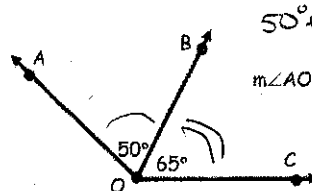
Term	Definition	Notation
point	An exact position or location in a given plane.	 P.
L↕NE	The set of points between points A and B in a plane and the infinite number of points that continue beyond the points.	 \overleftrightarrow{AB}
SEGMENT	A line with two endpoints.	 \overline{AB}
RAY	A line that starts at A, goes through B, and continues on.	 \overrightarrow{AB}
Plane	A flat, two-dimensional surface that extends infinitely far.	 Plane M
ANGLE	Formed by 2 rays coming together at a common point (Vertex)	 $\angle B$ or $\angle ABC$ $\angle CBA$

Types of Angles

TYPE OF ANGLE	MEASUREMENT	SKETCH
ACUTE	$< 90^\circ$	
RIGHT	$= 90^\circ$	
OBTUSE	$> 90^\circ$	
STRAIGHT	$= 180^\circ$	

Angle Vocabulary

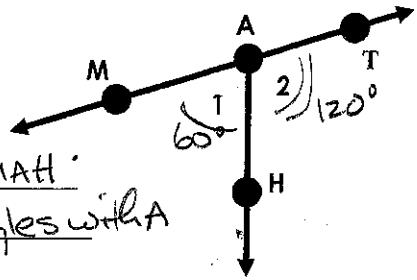
Term	Definition	Sketch
Complementary	Two angles whose sum is <u>90°</u>	
Supplementary	Two angles whose sum is <u>180°</u>	
Congruent Angles	Two or more angles with the <u>same</u> measure.	

Adjacent Angles	Two angles with a common <u>point and side</u> but no <u>common interior points</u> .	 $\angle 1 + \angle 2$ are adjacent
Angle Bisector	A ray (or line or segment) that divides an angle into two <u>congruent</u> angles	
Vertical Angles	Two angles are vertical angles if their sides form two pairs of opposite rays. VERTICAL ANGLES ARE <u>congruent</u>	
Linear Pair	Two adjacent angles are linear pairs if their non-common sides are opposite rays. LINEAR PAIRS ARE <u>supplementary</u>	
Angle Addition Postulate	If B lies on the interior of $\angle AOC$, then $m\angle AOB + m\angle BOC = m\angle AOC$.	

Practice

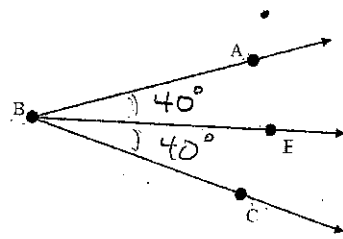
Name an example of each of the following:

- Line Segment: \overline{MA} A line: \overleftrightarrow{MT} A ray: \overrightarrow{AH}
- Name the angle represented with the number 1 using 3 letters. $\angle MAH$
- Why can't you name it angle A? there are multiple angles with A
- Is this angle an obtuse, acute, or right angle? acute
- If angle 1 is 60 degrees, what is the measure of angle 2? 120°
- Can two supplementary angles both be obtuse angles? ~~Yes~~ Right? Right



\overline{BE} is an angle bisector.

- If $m\angle ABE = 40^\circ$, then $m\angle EBC =$ 40°.
- If $m\angle ABC = 4x - 12$ & $m\angle ABE = 24^\circ$, then $x =$ 15.
 $4x - 12 = 48$
 $4x = 60$
 $x = 15$



- $\angle 1$ and $\angle 2$ are complementary. Solve for x and the measure of both angles.
 $\angle 1 = 5x + 2$
 $\angle 2 = 2x + 4$
 $\angle 1 + \angle 2 = 90^\circ$
 $5x + 2 + 2x + 4 = 90$
 $7x + 6 = 90$
 $7x = 84$
 $x = 12$
 $5(12) + 2 = 62^\circ$
 $2(12) + 4 = 28^\circ$
- $\angle 1$ and $\angle 2$ are supplementary. Solve for x and the measure of both angles.
 $\angle 1 = 12x + 4$
 $\angle 2 = 9x + 8$
 $12x + 4 + 9x + 8 = 180$
 $21x + 12 = 180$
 $21x = 168$
 $x = 8$
 $12(8) + 4 = 100^\circ$
 $9(8) + 8 = 80^\circ$

- One of two complementary angles is 16 degrees less than its complement. Find the measure of both angles.

$$\begin{aligned}
 x + (x - 16) &= 90 \\
 2x - 16 &= 90 \\
 2x &= 106 \\
 x &= 53
 \end{aligned}$$

The angles are $53^\circ + 37^\circ$