
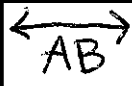
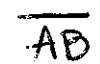
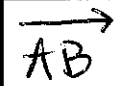
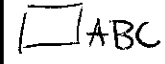



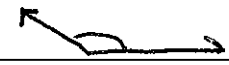



Name: \_\_\_\_\_ Date: \_\_\_\_\_

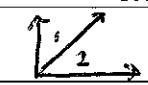
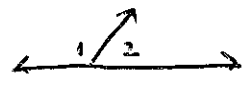
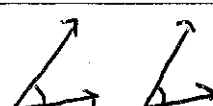
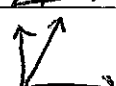
**Quick Geometry Vocabulary Review**

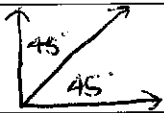

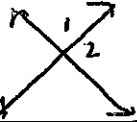
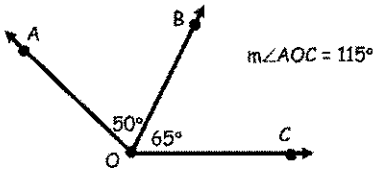
| Term           | Definition   | Notation  |
|----------------|--|---|
| <b>point</b>   | An exact position or location in a given plane.  |  |
| <b>L↕NE</b>    | The set of points between points A and B in a plane and the infinite number of points that continue beyond the points. |  |
| <b>SEGMENT</b> | A line with two endpoints.   |  |
| <b>RAY</b>     | A line that starts at A, goes through B, and continues on.   |  |
| <b>P□ane</b>   | A flat, two-dimensional surface that extends infinitely far.   |  |
| <b>ANGLE</b>   | Formed by 2 rays coming together at a common point (Vertex)  |  |

**Types of Angles**

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

**Angle Vocabulary**

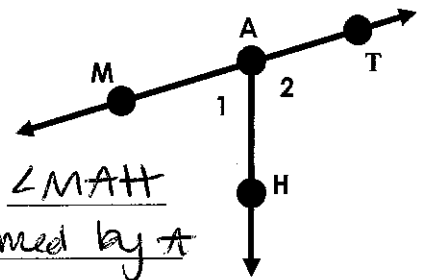
| Term                    | Definition   | Sketch  |
|-------------------------|--|---|
| <b>Complementary</b>    | Two angles whose sum is <u>90</u>  |  |
| <b>Supplementary</b>    | Two angles whose sum is <u>180</u>   |  |
| <b>Congruent Angles</b> | Two or more angles with the <u>same</u> measure.   |  |
| <b>Adjacent Angles</b>  | Two angles with a common <u>vertex</u> and <u>Ray</u> but no <u>common interior points</u> . |  |

|  |   |   |
|--|---|---|
| <p><b>Angle Bisector</b></p>           | <p>A ray (or line or segment) that divides an angle into two <u>equal</u> angles</p>  |  |
| <p><b>Vertical Angles</b></p>          | <p>Two angles are vertical angles if their sides form two pairs of opposite rays.<br/><b>VERTICAL ANGLES ARE <u>congruent</u></b></p>     |  |
| <p><b>Linear Pair</b></p>              | <p>Two adjacent angles are linear pairs if their non-common sides are opposite rays.<br/><b>LINEAR PAIRS ARE <u>supplementary</u></b></p> |  |
| <p><b>Angle Addition Postulate</b></p> | <p>If B lies on the interior of <math>\angle AOC</math>, then <math>m\angle AOB + m\angle BOC = m\angle AOC</math>.</p>                   |  |

**Practice**

Name an example of each of the following:

- Line Segment: AT A line: MT A ray: AT



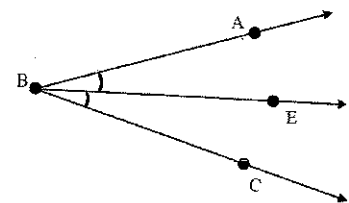
- Name the angle represented with the number 1 using 3 letters.  $\angle MAH$
- Why can't you name it angle A? Two angles are formed by A
- Is this angle an obtuse, acute, or right angle? Acute
- If angle 1 is 60 degrees, what is the measure of angle 2? 120
- Can two supplementary angles both be obtuse angles? Acute? Right?  
NO ~~yes~~ no yes

$\overline{BE}$  is an angle bisector.

7. If  $m\angle ABE = 40^\circ$ , then  $m\angle EBC =$  40

8. If  $m\angle ABC = 4x - 12$  &  $m\angle ABE = 24^\circ$ , then  $x =$  \_\_\_\_\_

$m\angle EBC = 24^\circ$        $4x - 12 = 48$   
 $m\angle ABC = 48^\circ$        $4x = 60$      $x =$



9.  $\angle 1$  and  $\angle 2$  are complementary. Solve for  $x$  and the measure of both angles.

$\angle 1 = 5x + 2$        $5x + 2 + 2x + 4 = 90$        $7x = 84$        $\angle 1 = 5(12) + 2 = 62$   
 $\angle 2 = 2x + 4$        $7x + 6 = 90$        $x = 12$        $\angle 2 = 2(12) + 4 = 28$

10.  $\angle 1$  and  $\angle 2$  are supplementary. Solve for  $x$  and the measure of both angles.

$\angle 1 = 12x + 4$        $12x + 4 + 9x + 8 = 180$        $21x = 168$        $\angle 1 = 12(8) + 4 = 100$   
 $\angle 2 = 9x + 8$        $21x + 12 = 180$        $x = 8$        $\angle 2 = 9(8) + 8 = 80$

11. One of two complementary angles is 16 degrees less than its complement. Find the measure of both angles.  $\angle 1$ ,  $\angle 2 = \angle 1 - 16$

$\angle 1 + \angle 2 = 180$        $\angle 1 + \angle 2 = 90$   
 $\angle 1 + \angle 1 - 16 = 180$        $\angle 1 + \angle 1 - 16 = 90$   
 $2\angle 1 = 196$        $2\angle 1 = 106$   
 $\angle 1 = 98$        $\angle 1 = 53$   
 $\angle 2 = 82$        $\angle 2 = 37$