**Geometry Lesson 1-4: Students will define the following: [a] segment, [b] angle, [c] circle; etc.**

**They will also review how to copy a segment and an angle, as well as bisect a segment and an angle.**

 **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**GEOMETRY NOTES Basic Constructions and Definitions: Page 1-4**

 **Zero, One, and Two Dimensions**

**[1st] What is A point is an undefined term; it names a specific \_\_\_\_ in**

 **a point? space. It has \_\_\_\_\_\_\_ length, width or \_\_\_\_\_\_\_. For**

 **example, A is a point:**

 **. A**

**[2nd] What is A line is an undefined term: it is a set of all \_\_\_\_\_\_ along**

 **a line? a straight \_\_\_\_, going forever in two \_\_\_\_\_\_\_\_\_\_directions.**

 **A line has \_\_\_\_\_\_ length and \_\_\_\_ width and height. For**

 **example,** $\overleftrightarrow{BC}$ **is a line passing through points \_\_\_ and \_\_\_\_:**

 **. A**

$ \overleftrightarrow{ B C }$

**[3rd] What does 🡪NOTE: *Any two\_\_\_\_\_\_ determine a \_\_\_\_\_.* This means any**

 **collinear mean? two points are collinear (are on the same line—EVEN IF**

 **that line is not shown). This means A and B are \_\_\_\_\_\_\_\_\_\_.**

 **Likewise, A and C are \_\_\_\_\_\_\_\_\_\_.**

**[4th] Noncollinear A, B and C are \_\_\_\_\_\_\_\_\_\_\_\_\_\_, because all three do not line**

 **means what? up.**

**[5th] What is a A ray is the set of all points that start from a given point**

 **ray? and continue forever in \_\_\_\_ direction (Harry Stiles**

 **notwithstanding). A ray has \_\_\_\_\_\_ length and no width or**

 **height. For example,** $\vec{DE}$ **is a ray that starts at \_\_\_\_ and**

 **goes through \_\_\_\_ forever:**

$\vec{D E }$

**[6th] What is a A segment is a set of all points between two given points. A**

 **segment? segment is \_\_\_\_\_ in length. For example,** $\overbar{FG}$ **is a segment:**

$\overbar{F G}$

**[7th] What is an An angle is formed by any two rays that have a common**

 **angle? \_\_\_\_\_\_. The common \_\_\_\_\_ is called the \_\_\_\_\_\_ of the**

 **angle. For example, / ABC is an angle with vertex \_\_\_\_ (and**

 **this is why \_\_\_ is the middle letter for the angle’s name):**

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**[8th] What is a A circle is the set of all points that are \_\_\_\_\_\_ from a**

 **circle? given point called the \_\_\_\_\_. Circle D is an example:**

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**[9th] What is an An arc is a set of points (NOT all possible points) that are**

 **arc? \_\_\_\_\_\_\_ from a given point.** $\hat{FG}$ **is an example:**

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**[10th] Solve this equation.**

**Explain each step. 24 – 5x = 3(4x + 5)**

**[11th] What is an angle**

**bisector? Construct an example.**