

Henry Ford Early College  
H. Geometry: Unit 1 Review  
Unit 1: Vocabulary Essentials and Angle Relationships  
Chapter 1: Sections 1.3-1.6, 1.8

**Directions: Match the following terms with their precise definitions.**

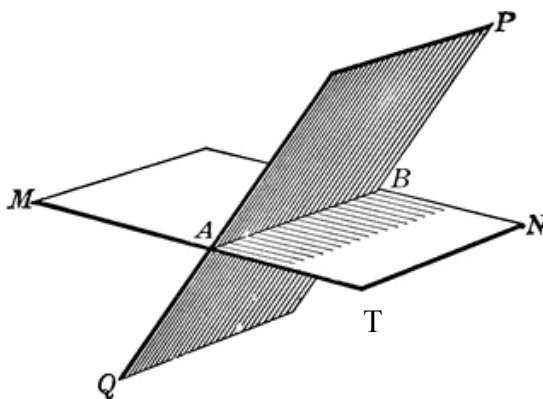
- |                            |  |
|----------------------------|--|
| 1. ____line segment        | A. Lines that are coplanar and do not intersect. |
| 2. ____perpendicular lines | B. Part of a line consisting of 2 endpoints.     |
| 3. ____parallel lines      | C. Formed by 2 rays with the same endpoint.      |
| 4. ____angle               | D. 2 Lines that intersect at a 90 angle.         |

**Directions: Identify the following from the diagram.**

5) 3 Collinear points \_\_\_\_\_

6) 3 coplanar points \_\_\_\_\_

7) a plane \_\_\_\_\_



**Directions: Identify the following from the diagram. Make sure you have the appropriate geometric markings.**

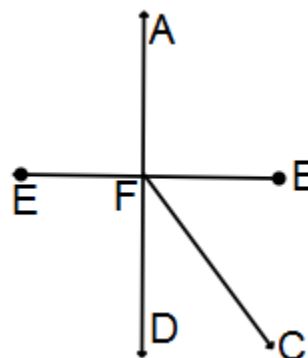
8) Line \_\_\_\_\_

9) Segment \_\_\_\_\_

10) Ray \_\_\_\_\_

11) Angle \_\_\_\_\_

12) Opposite rays \_\_\_\_\_



13.) Find the distance between points  $P(8, 2)$  and  $Q(3, 8)$  to the nearest tenth.

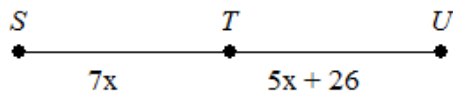
Directions: Draw and label the following correctly.

|                                      |                              |                             |
|--------------------------------------|------------------------------|-----------------------------|
| <b>Perpendicular Bisector</b><br>14) | <b>Angle Bisector</b><br>15) | <b>Obtuse Angle</b><br>16)  |
| <b>Acute Angle</b><br>17)            | <b>Point</b><br>18)          | <b>Opposite Rays</b><br>19) |

20.) If  $EF = 2x - 5$ ,  $FG = 4x - 8$ , and  $EG = 29$ , find the values of  $x$ ,  $EF$ , and  $FG$ . The drawing is not to scale.



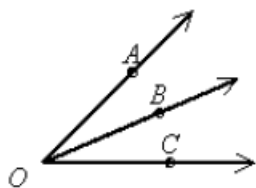
21.) If  $T$  is the midpoint of  $SU$ , find the values of  $x$  and  $ST$ . The diagram is not to scale.



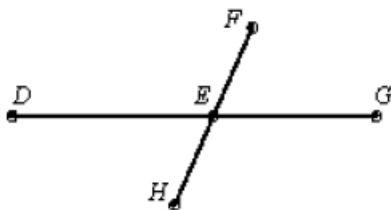
22.)  $M(3, 3)$  is the midpoint of  $RS$ . The coordinates of  $S$  are  $(4, 4)$ . What are the coordinates of  $R$ ?

a.  $(6, 6)$       b.  $(2, 2)$       c.  $(3.5, 3.5)$       d.  $(5, 5)$

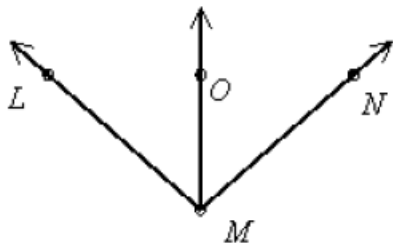
- 23.) If  $m\angle BOC = 36$  and  $m\angle AOC = 62$ , then what is the measure of  $\angle AOB$ ? The diagram is not to scale.



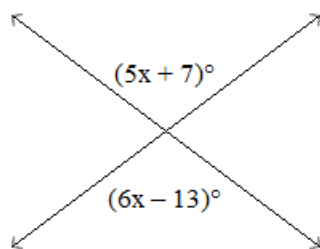
- 24.) If  $m\angle DEF = 107$ , then what are  $m\angle FEG$  and  $m\angle HEG$ ? The diagram is not to scale.



- 25.)  $\overrightarrow{MO}$  bisects  $\angle LMN$ ,  $m\angle LMO = 8x - 22$ , and  $m\angle NMO = 2x + 38$ . Solve for  $x$  and find  $m\angle LMN$ . The diagram is not to scale.

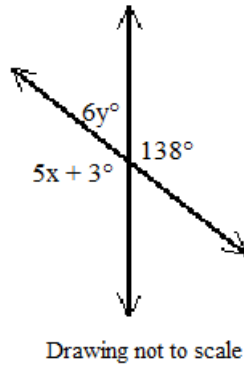


- 26.) Find the value of  $x$ .

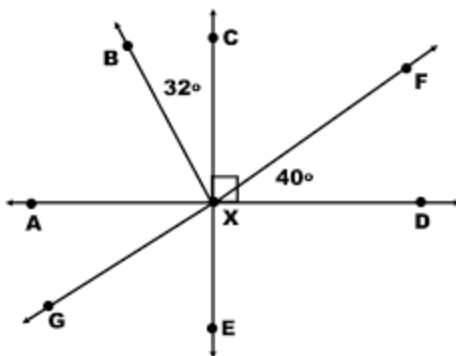


Drawing not to scale

27.) Find the values of  $x$  and  $y$ .



Use the diagram below for questions 28 – 33.



28. Name a right angle. \_\_\_\_\_

29. Name a pair of complementary angles. \_\_\_\_\_ and \_\_\_\_\_

30. Name a pair of vertical angles. \_\_\_\_\_ and \_\_\_\_\_

31. Name a pair of supplementary angles. \_\_\_\_\_ and \_\_\_\_\_

32. Name a straight angle. \_\_\_\_\_

33. Find the measure of the angles below:

$$m\angle AXB = \underline{\hspace{2cm}}$$

$$m\angle CXF = \underline{\hspace{2cm}}$$

$$m\angle AXG = \underline{\hspace{2cm}}$$

$$m\angle EXD = \underline{\hspace{2cm}}$$

$$m\angle BXG = \underline{\hspace{2cm}}$$

$$m\angle BXF = \underline{\hspace{2cm}}$$