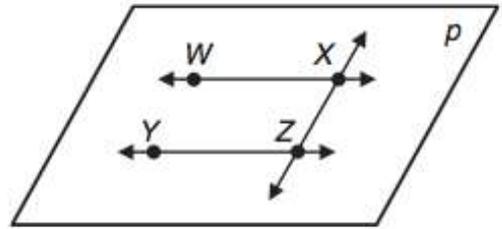


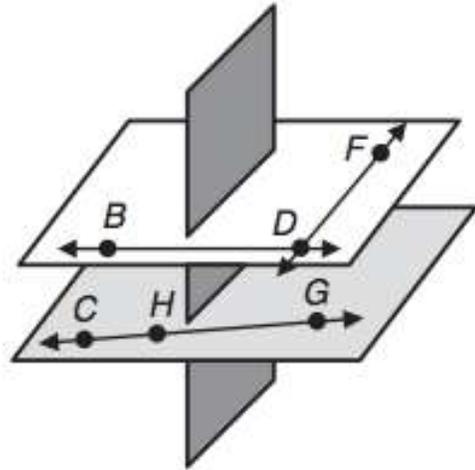
**Integrated Math 2**  
**Geometry Definitions**  
**Mrs. Schempp**

Name \_\_\_\_\_  
 Period \_\_\_\_\_ Date \_\_\_\_\_

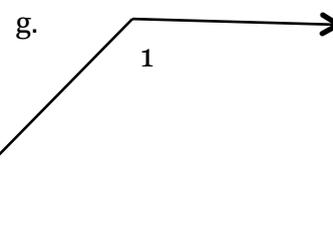
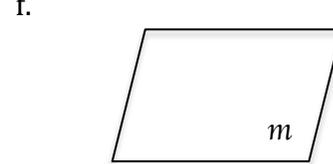
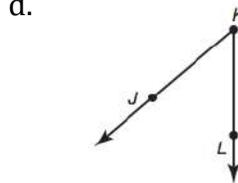
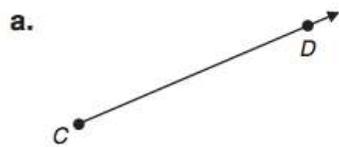
- Identify each of the following in the figure shown.
  - How many points are there?
  - How many lines are there?
  - What is the name of the plane?
  - Classify each angle as acute, obtuse, straight or right.  
 $\angle WXZ$                        $\angle YZX$
  - What is another name for  $\angle WXZ$ ?



- Identify each of the following in the figure to the right.
  - Are point B and point F collinear?  
 Are point B and point D collinear?
  - Which lines are coplanar?
  - Which lines are skew?
  - Name all rays in  $\overrightarrow{CG}$ .
  - Name all line segments in  $\overline{CG}$ .



3. Name each geometric figure properly. Which figures have more than one name with the given labels?



4. Describe the intersections of planes  $p$ ,  $w$ , and  $z$  in each figure.

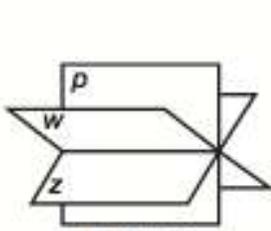


Figure 1

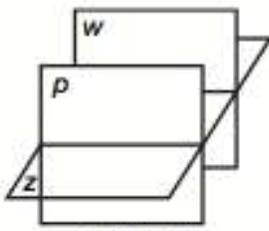


Figure 2

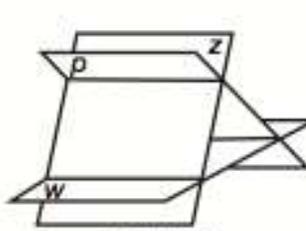


Figure 3

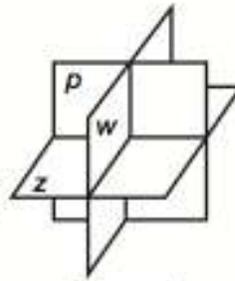


Figure 4

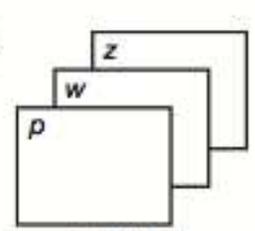


Figure 5

5. Which line is longer, line  $AB$  or line  $CD$ ?



6. Which point is larger, point  $A$  or point  $B$ ?



7-11. Refer to the figure to the right to answer the following questions.

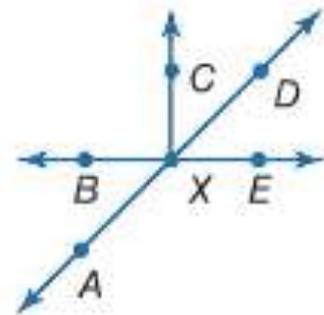
7. Use the Segment Addition Postulate to find the missing value:  $\overline{AX} + \overline{XD} = \overline{AD}$

- a. Given:  $AX = 15$  and  $AD = 32$ , Find:  $XD$       b.  $AX = 12$  and  $XD = 5$ , Find:  $AD$

8. Use the Angle Addition Postulate to find the missing value:  $\angle AXB + \angle BXC = \angle AXC$

- a. Given:  $m\angle AXB = 42^\circ$  and  $m\angle BXC = 90^\circ$  find  $m\angle AXC$

- 9a. Identify a pair of vertical angles that appear to be acute.  
 b. Identify a pair of adjacent angles that appear to be complimentary.  
 c. Identify a linear pair.  
 d. Identify an obtuse angle.  
 e. Identify a straight angle.  
 f. Identify a right angle.  
 g. Name the angle that is vertical to  $\angle EXA$ .



10. Explain why you cannot name an angle "X" in the figure.

11. How many angles are there in the figure?