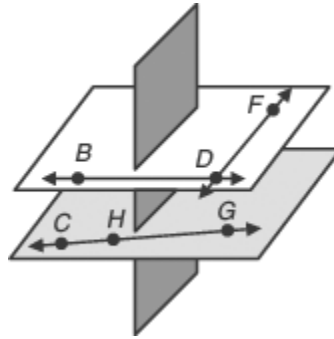


**PAP Geometry**  
**1.1 HW - Points, Lines, Planes, Rays, and Line Segments**

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

1. Identify each of the following in the figure shown.



- a. Name 3 collinear points.
- b. Name 2 coplanar lines.
- c. Name 2 skew lines.

2. Draw and label three collinear points  $X$ ,  $Y$ , and  $Z$  such that point  $Y$  is between points  $X$  and  $Z$  and the distance between points  $X$  and  $Y$  is one half the distance between points  $Y$  and  $Z$ .

3. Use a symbol to represent the name of each geometric figure.

a.



b.



c.

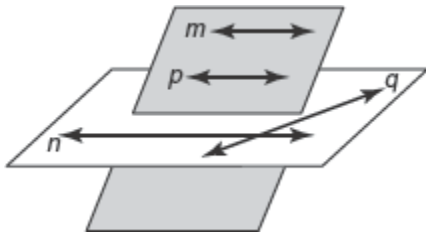


Draw a figure for each description. Label all points mentioned in the description.

4. Points  $A$ ,  $D$ , and  $X$  are collinear such that point  $A$  is located halfway between points  $D$  and  $X$ .

Identify all examples of coplanar lines in each figure.

5.



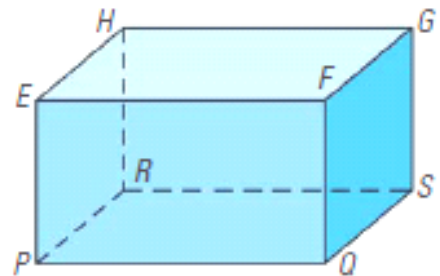
6. Complete the following with always, sometimes or never.

- a) A line and a point are \_\_\_\_\_ coplanar.
- b) Two segments are \_\_\_\_\_ coplanar.
- c) Opposite rays \_\_\_\_\_ have the same endpoint.
- d) Two points are \_\_\_\_\_ collinear.

For 7-9, Use the diagram at the right.

7. Name the intersection of plane  $PQS$  and plane  $EFQ$ .

8. Are the points  $P$ ,  $Q$ , and  $F$  collinear? Are they coplanar?



9. Are points  $P$  and  $G$  collinear? Are they coplanar?