

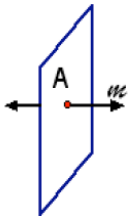
## Homework 1-1 Point, Line, Plane

*Using the appropriate labels sketch the following relationships.*

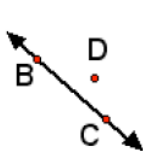
1.  $\overleftrightarrow{CD}$  intersects  $\overleftrightarrow{GH}$  at  $K$ .
2. Line  $m$  is not on plane  $\mathcal{R}$ .
3. Points  $S$ ,  $T$ ,  $U$ , and  $V$  are collinear.
4. Line  $h$  does not intersect  $\overleftrightarrow{YZ}$ .
5.  $\overleftrightarrow{ML}$  is on plane  $\mathcal{Q}$ .
6. Plane  $ABCD$  intersects plane  $\mathcal{R}$  at line  $j$ .

*Using appropriate notation describe the following sketches.*

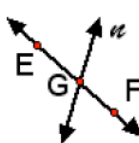
7.



8.

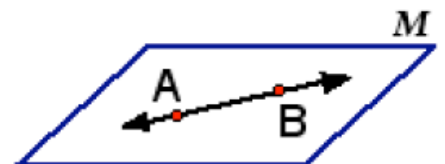


9.



*Using the figure to the right decide if the following statements are true or false.*

10.  $\overleftrightarrow{AB}$  is in plane  $\mathcal{M}$ .
11.  $\overleftrightarrow{AB}$  is on plane  $\mathcal{M}$ .
12. Plane  $\mathcal{M}$  contains  $\overleftrightarrow{AB}$ .
13.  $\overleftrightarrow{AB}$  intersects plane  $\mathcal{M}$ .



# *Homework 1-1 Point, Line, Plane*

*Using the figure to the right answer the following questions.*

14. How many planes make up the figure?
15. Name four of the planes that make up the object.
16. Are  $A$ ,  $B$ ,  $C$ , and  $D$  coplanar?
17. Are  $A$ ,  $D$ ,  $H$ , and  $G$  coplanar?
18. Are  $E$ ,  $F$ ,  $G$ , and  $B$  coplanar?
19. Name two planes that intersect at  $\overleftrightarrow{GB}$ .
20. What is the intersection of plane  $FAD$  and  $TEF$ ?

