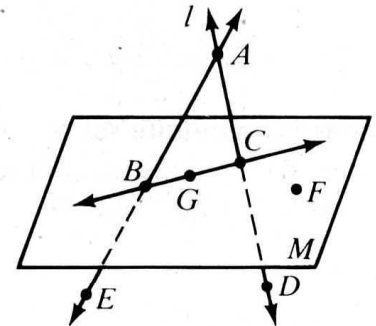


WORKSHEET: SECTIONS 1.2-1.3

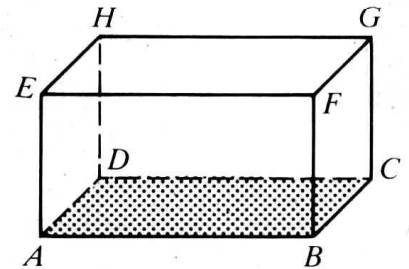
Classify each statement as true or false.

1. \overleftrightarrow{BC} is in plane M .
2. Plane M contains \overleftrightarrow{AB} .
3. Line l intersects \overleftrightarrow{AB} at point B .
4. \overleftrightarrow{AB} and \overleftrightarrow{DA} intersect at A .
5. \overleftrightarrow{AD} is in plane M .
6. Plane M intersects \overleftrightarrow{AE} at point B .
7. \overleftrightarrow{AE} intersects plane M at point B .
8. $A, B,$ and E are collinear.
9. $B, F,$ and D are collinear.
10. $A, B,$ and C are coplanar.
11. $B, C, F,$ and G are coplanar.
12. $A, B, C,$ and G are coplanar.
13. $A, B, C,$ and F are coplanar.



The plane that contains the shaded region can be called plane $ABCD$.

14. Name three lines that intersect at point G .
15. Name two planes whose intersection is \overleftrightarrow{FB} .
16. Name the intersection of plane $EHGF$ and plane $EFBA$.
17. Name two planes that do not intersect.
18. Are points $D, H, G,$ and C coplanar?
19. Are points $D, H, G,$ and F coplanar?
20. Are points $A, B, G,$ and H coplanar?

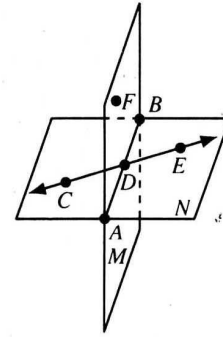


Sketch and label the figures described. Use dashes for parts hidden from view.

21. Line \overleftrightarrow{AB} intersects plane X at point C .
22. Two planes M and N intersect in line l .
23. Horizontal plane P contains two lines \overleftrightarrow{RS} and \overleftrightarrow{TU} that intersect at point O .

Classify each statement as true or false. (Write *T* or *F*)

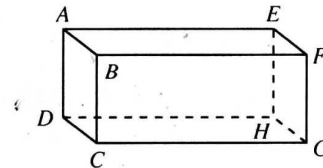
3. \overleftrightarrow{AB} is in plane *M*. _____
4. *M* contains \overleftrightarrow{CD} . _____
5. \overleftrightarrow{AB} intersects *N* at *E*. _____
6. \overleftrightarrow{AB} intersects \overleftrightarrow{CD} at *D*. _____
7. *F* is in plane *N*. _____
8. *B* is in plane *N*. _____
9. *A*, *D*, and *F* are coplanar. _____
10. *N* contains *C*, *D*, *E*, and *F*. _____
11. *E* is on \overleftrightarrow{CD} . _____
12. *C*, *D*, and *E* are collinear. _____



Exs. 3-12

Name a fourth point that is in the same plane as the given points.

13. *A*, *B*, *F* _____
14. *E*, *H*, *G* _____
15. *C*, *G*, *E* _____
16. *E*, *B*, *C* _____



Exs. 13-20

Name each of the following.

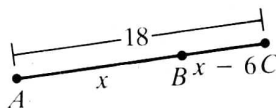
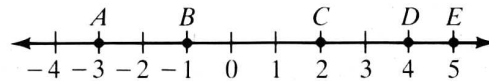
17. Three lines that intersect at point *E* _____
18. The plane that does *not* intersect plane *FGHE* _____
19. Two planes that intersect in \overleftrightarrow{CG} _____
20. Three planes that intersect at point *D* _____

Sketch and label the figures described.

21. Vertical planes *P* and *Q* intersect in \overleftrightarrow{RS} .
22. Horizontal plane *M* containing \overleftrightarrow{AB} intersects \overleftrightarrow{AC} at point *A*.

For Exercises 13-16, refer to the number line at the right.

13. Find *BD*.
14. Find the length of \overline{AC} .
15. Find the distance between *B* and *E*.
16. Find the coordinate of the midpoint of \overline{AE} .
17. Find the value of *x*.



18. In the diagram, $\overline{AC} \cong \overline{CE}$ and *B* is the midpoint of \overline{AC} . $CD = 2$ and $AB = 3$. Find *BC*, *AC*, and *DE*.

