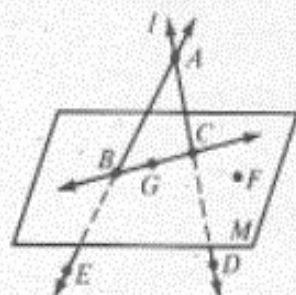


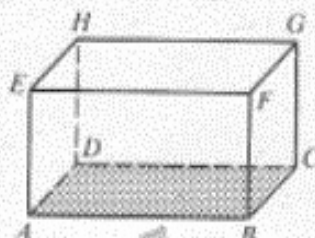
Classify each statement as true or false.

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



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

14. Name three lines that intersect at point G . $\overleftrightarrow{HG}$, $\overleftrightarrow{CG}$, $\overleftrightarrow{FG}$
15. Name two planes whose intersection is $\overleftrightarrow{FB}$. $EFBA$, $FGCB$
16. Name the intersection of plane $EHGF$ and plane $EFBA$. $\overleftrightarrow{EF}$
17. Name two planes that do not intersect. $ABCD$, $EFGH$; $FGCB$, $EHDA$; $HGCD$, $EFBA$
18. Are points D , H , G , and C coplanar? **yes**
19. Are points D , H , G , and F coplanar? **no**
20. Are points A , B , G , and H coplanar? **yes**



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

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 .

