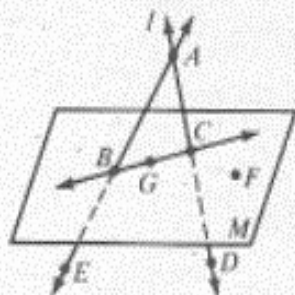


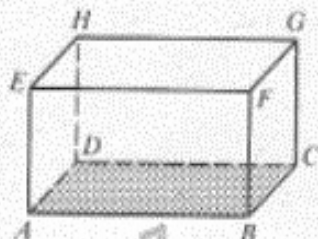
Classify each statement as true or false.

1. \overrightarrow{BC} is in plane M . **true**
2. Plane M contains \overrightarrow{AB} . **false**
3. Line l intersects \overrightarrow{AB} at point B . **false**
4. \overrightarrow{AB} and \overrightarrow{DA} intersect at A . **true**
5. \overrightarrow{AD} is in plane M . **false**
6. Plane M intersects \overrightarrow{AE} at point B . **true**
7. \overrightarrow{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 . $\overrightarrow{HG}, \overrightarrow{CG}, \overrightarrow{FG}$
15. Name two planes whose intersection is \overrightarrow{FB} . $EFBA, FGCB$
16. Name the intersection of plane $EHGF$ and plane $EFBA$. \overrightarrow{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 \overrightarrow{AB} intersects plane X at point C .
22. Two planes M and N intersect in line l .
23. Horizontal plane P contains two lines \overrightarrow{RS} and \overrightarrow{TU} that intersect at point O .

