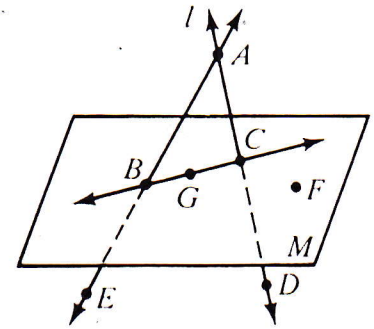


WORKSHEET: SECTIONS 1.2-1.3

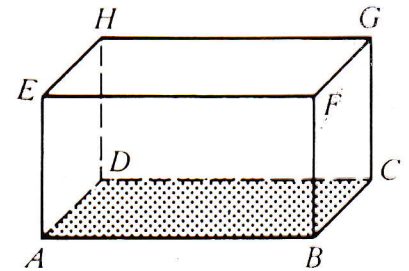
Classify each statement as true or false.

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



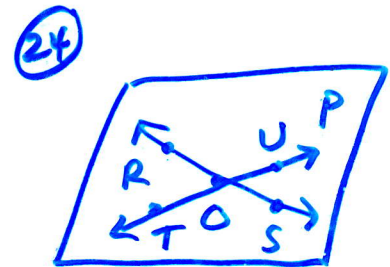
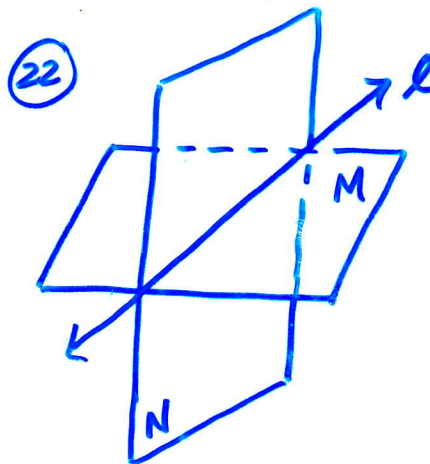
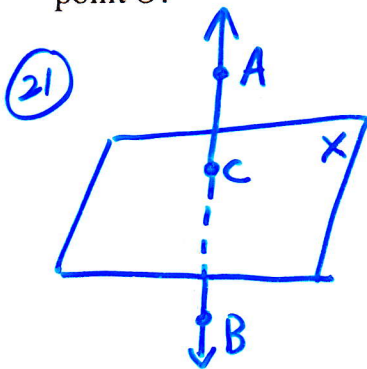
The plane that contains the shaded region can be called plane $ABCD$.

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. **$ABCD, EFGH$**
18. Are points $D, H, G,$ and C coplanar? **yes**
19. Are points $D, H, G,$ and F coplanar? **no** | or **$EHDA, FGCB$**
20. Are points $A, B, G,$ and H coplanar? **yes** | or **$HGCD, EFBA$**



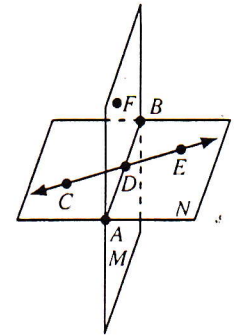
Sketch and label the figures described. Use dashes for parts hidden from view.

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.)

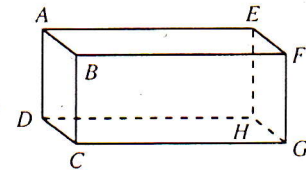
3. \overleftrightarrow{AB} is in plane M . T 4. M contains \overleftrightarrow{CD} . F
 5. \overleftrightarrow{AB} intersects N at E . F 6. \overleftrightarrow{AB} intersects \overleftrightarrow{CD} at D . T
 7. F is in plane N . F 8. B is in plane N . T
 9. A , D , and F are coplanar. T 10. N contains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



Exs. 3-12

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

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



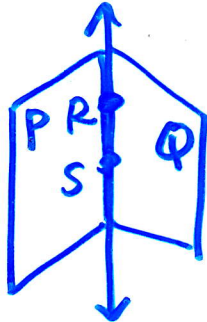
Exs. 13-20

Name each of the following.

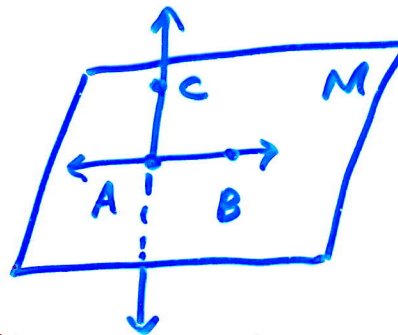
17. Three lines that intersect at point E \overleftrightarrow{EF} , \overleftrightarrow{AE} , \overleftrightarrow{EH}
 18. The plane that does *not* intersect plane $FGHE$ $BCDA$
 19. Two planes that intersect in \overleftrightarrow{CG} $CBFG$, $CDHG$
 20. Three planes that intersect at point D $ABCD$, $AEHD$, $DCGH$

Sketch and label the figures described.

21. Vertical planes P and Q intersect in \overleftrightarrow{RS} .

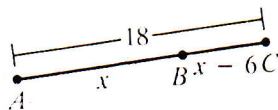
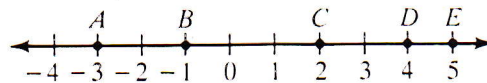


22. Horizontal plane M containing \overleftrightarrow{AB} intersects \overleftrightarrow{AC} at point A .



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

13. Find BD . 5
 14. Find the length of \overline{AC} . 5
 15. Find the distance between B and E . 6
 16. Find the coordinate of the midpoint of \overline{AE} . 1
 17. Find the value of x . $x=12$



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 .



$BC = 3$
 $AC = 6$
 $DE = 4$