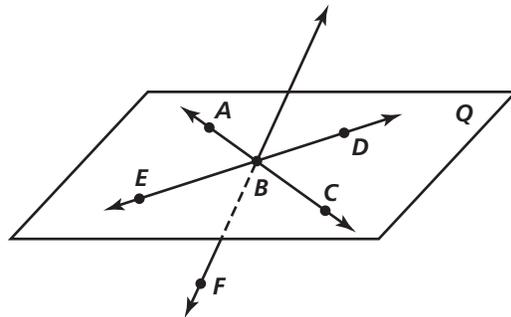


# Practice 1-2

## Points, Lines, and Planes

Refer to the diagram at the right for Exercises 1–15.



1. Name  $\overleftrightarrow{AB}$  in another way.
2. Give two other names for plane  $Q$ .
3. Why is  $EBD$  not an acceptable name for plane  $Q$ ?

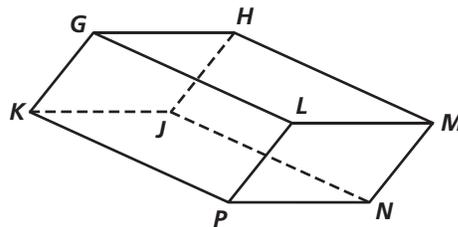
Are the following sets of points collinear?

- |                                      |                      |
|--------------------------------------|----------------------|
| 4. $\overleftrightarrow{AB}$ and $C$ | 5. $B$ and $F$       |
| 6. $\overleftrightarrow{EB}$ and $A$ | 7. $F$ and plane $Q$ |

Are the following sets of points coplanar?

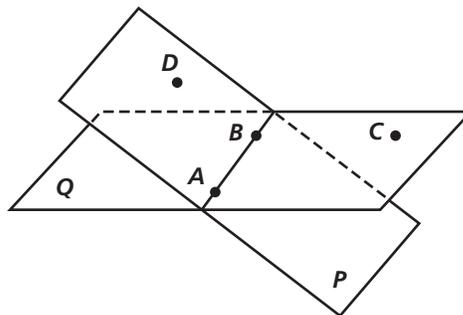
- |   |   |
|---|---|
| 8. $E, B,$ and $F$  | 9. $\overleftrightarrow{DB}$ and $\overleftrightarrow{FC}$  |
| 10. $\overleftrightarrow{AC}$ and $\overleftrightarrow{ED}$ | 11. $\overleftrightarrow{AE}$ and $\overleftrightarrow{DC}$ |
| 12. $F, A, B,$ and $C$                                      | 13. $F, A, B,$ and $D$                                      |
| 14. plane $Q$ and $\overleftrightarrow{EC}$                 | 15. $\overleftrightarrow{FB}$ and $\overleftrightarrow{BD}$ |

Find the intersection of the following lines and planes in the figure at the right.



16.  $\overleftrightarrow{GK}$  and  $\overleftrightarrow{LG}$
17. planes  $GLM$  and  $LPN$
18. planes  $GHPN$  and  $KJP$
19. planes  $HJN$  and  $GKL$
20.  $\overleftrightarrow{KP}$  and plane  $KJN$
21.  $\overleftrightarrow{KM}$  and plane  $GHL$

Refer to the diagram at the right.



22. Name plane  $P$  in another way.
23. Name plane  $Q$  in another way.
24. What is the intersection of planes  $P$  and  $Q$ ?
25. Are  $A$  and  $C$  collinear?
26. Are  $D, A, B,$  and  $C$  coplanar?
27. Are  $D$  and  $C$  collinear?
28. What is the intersection of  $\overleftrightarrow{AB}$  and  $\overleftrightarrow{DC}$ ?
29. Are planes  $P$  and  $Q$  coplanar?
30. Are  $\overleftrightarrow{AB}$  and plane  $Q$  coplanar?
31. Are  $B$  and  $C$  collinear?