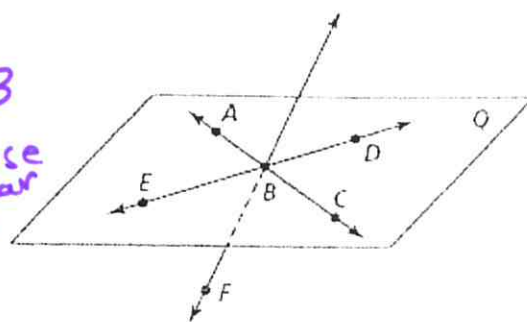


Practice 1-3

Points, Lines, and Planes

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

1. Name \overleftrightarrow{AB} in another way. \overleftrightarrow{BA}
2. Give two other names for plane Q . $AECD, CDB$
3. Why is EBD not an acceptable name for plane Q ? Choose non-collinear point.



Are the following sets of points collinear?

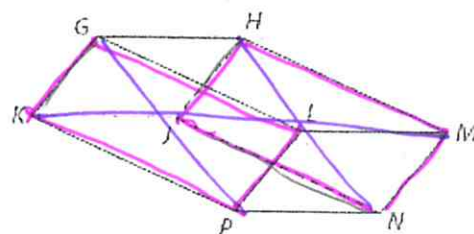
4. \overleftrightarrow{AB} and C **yes**
5. B and F **yes**
6. \overleftrightarrow{EB} and A **NO**
7. F and plane Q **yes**

Are the following sets of points coplanar?

8. $E, B,$ and F **NO**
9. \overleftrightarrow{DB} and \overleftrightarrow{FC} **NO**
10. \overleftrightarrow{AC} and \overleftrightarrow{ED} **yes**
11. \overleftrightarrow{AE} and \overleftrightarrow{DC} **yes**
12. $F, A, B,$ and C **NO**
13. $F, A, B,$ and D **NO**
14. plane Q and \overleftrightarrow{EC} **yes**
15. \overleftrightarrow{FB} and \overleftrightarrow{BD} **NO**

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

16. \overleftrightarrow{GK} and \overleftrightarrow{LG} **Point G**
17. planes GLM and LPN **\overleftrightarrow{LM}**
18. planes $GHPN$ and KJP **\overleftrightarrow{PN}**
19. planes HJN and GKL **No intersection**
20. \overleftrightarrow{KP} and plane KJN **\overleftrightarrow{KP}**
21. \overleftrightarrow{KM} and plane GHL **Point M**



Refer to the diagram at the right.

22. Name plane P in another way. ABD
23. Name plane Q in another way. ABC
24. What is the intersection of planes P and Q ? **\overleftrightarrow{AB}**
25. Are A and C collinear? **yes**
26. Are $D, A, B,$ and C coplanar? **yes**
27. Are D and C collinear? **yes**
28. What is the intersection of \overleftrightarrow{AB} and \overleftrightarrow{DC} ? **Point M**
29. Are planes P and Q coplanar? **NO**
30. Are \overleftrightarrow{AB} and plane Q coplanar? **yes**
31. Are B and C collinear? **yes**

