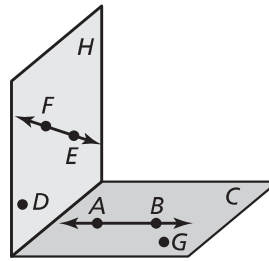


1.1

Practice B

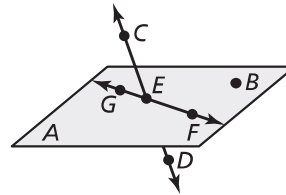
In Exercises 1–4, use the diagram.

1. Name three points.
2. Name two lines.
3. Name all points in plane H .
4. Name the plane that contains points A , B , and G .



In Exercises 5–8, use the diagram.

5. Name one pair of opposite rays.
6. Name two points that are collinear with point D .
7. Name the point of intersection of line CD with plane A .
8. Name a point that is *not* coplanar with plane A .



In Exercises 9–11, sketch the figure described.

9. plane A and line \overline{BC} intersecting at point C
10. plane M and plane N *not* intersecting
11. lines a , b , and c intersecting at three points
12. A tripod can be used to level a camera. What geometric figure is modeled by the intersection of a tripod to the ground? Explain.

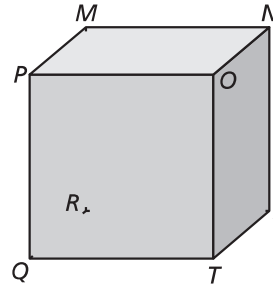
In Exercises 13 and 14, graph the inequality on a number line. Tell whether the graph is a *segment*, a *ray*, a *point*, or a *line*.

13. $x \geq 2$
14. $-4 < x < 4$
15. What is the maximum number of times two planes can intersect? What is the minimum number of times they can intersect?

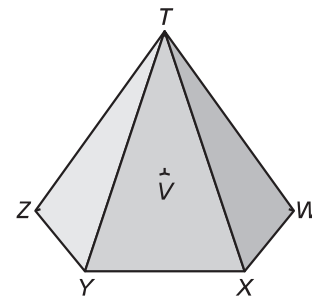
1.1 Enrichment and Extension

Points, Lines, and Planes

1. Name the three planes that intersect at point P .
2. Name the intersection of plane PQO and plane NMP .
3. Name three lines that intersect at point S .
4. Are points P , M , and Q collinear?
Are they coplanar?



5. Name the intersection of plane XYZ and plane TVW .
6. Name the two planes that intersect at \overline{XW} .
7. Name three planes that intersect at point Z .
8. In the figure at right, are there any places where at least four planes intersect? Explain your reasoning.



An equation in two-dimensional space can be written in the standard form $AX + BY = C$. The standard form of a linear equation in three-dimensional space can be written as $AX + BY + CZ = D$, where the point (x, y, z) is a point on the line.

Determine if the given two lines intersect at the given point. Explain your reasoning.

9. $3x + 2y + 4z = 12$
 $x + y + 2z = 6$
 $(0, 4, 1)$

10. $-2x - 4y + z = 8$
 $4x + 2y = -5$
 $(-2, 0, 3)$