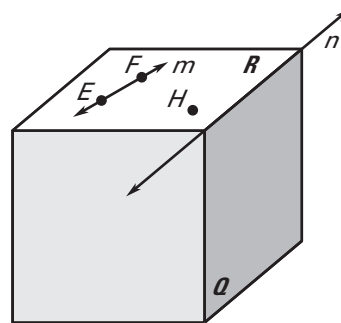


LESSON  
2.4**Practice B***For use with pages 96–102***Draw a sketch to illustrate each postulate.**

1. If two lines intersect, then their intersection is exactly one point.
2. If two points lie in a plane, then the line containing them lies in the plane.
3. If two planes intersect, then their intersection is a line.

**Use the diagram to state and write out the postulate that verifies the truth of the statement.**

4. The points  $E$ ,  $F$ , and  $H$  lie in a plane (labeled  $R$ ).
5. The points  $E$  and  $F$  lie on a line (labeled  $m$ ).
6. The planes  $Q$  and  $R$  intersect in a line (labeled  $n$ ).
7. The points  $E$  and  $F$  lie in a plane  $R$ .  
Therefore, line  $m$  lies in plane  $R$ .

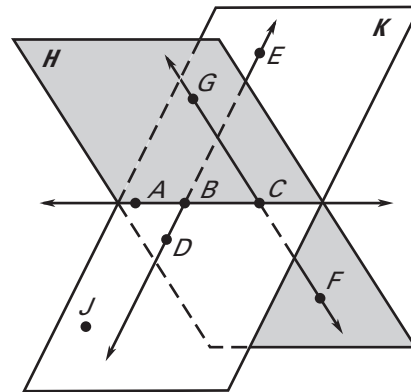
**In Exercises 8–11, think of the intersection of the ceiling and the front wall of your classroom as line  $k$ . Think of the center of the floor as point  $A$  and the center of the ceiling as point  $B$ .**

8. Is there more than one line that contains both points  $A$  and  $B$ ?
9. Is there more than one plane that contains both points  $A$  and  $B$ ?
10. Is there a plane that contains line  $k$  and point  $A$ ?
11. Is there a plane that contains points  $A$ ,  $B$ , and a point on the front wall?

LESSON  
2.4**Practice B** *continued*  
For use with pages 96–102

In Exercises 12–19, use the diagram to determine if the statement is **true** or **false**.

12. Points  $A$ ,  $B$ ,  $D$ , and  $J$  are coplanar.
13.  $\angle EBA$  is a right angle.
14. Points  $E$ ,  $G$ , and  $A$  are collinear.
15.  $\overleftrightarrow{FG} \perp$  plane  $H$
16.  $\angle ABD$  and  $\angle EBC$  are vertical angles.
17. Planes  $H$  and  $K$  intersect at  $\overleftrightarrow{AB}$ .
18.  $\overleftrightarrow{FG}$  and  $\overleftrightarrow{DE}$  intersect.
19.  $\angle GCA$  and  $\angle CBD$  are congruent angles.



20. **Neighborhood Map** A friend e-mailed you the following statements about a neighborhood. Use the statements to complete parts (a)–(e).

Building B is due south of Building A.

Buildings A and B are on Street 1.

Building C is due east of Building B.

Buildings B and C are on Street 2.

Building D is southeast of Building B.

Buildings B and D are on Street 3.

Building E is due west of Building C.

$\angle DBE$  formed by Streets 2 and 3 is acute.

- a. Draw a diagram of the neighborhood.
- b. Where do Streets 1 and 2 intersect?
- c. Classify the angle formed by Streets 1 and 2.
- d. What street is building E on?
- e. Is building E between buildings B and C? *Explain.*