Name _____ Date _____

LESSON 2.4

Practice

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.

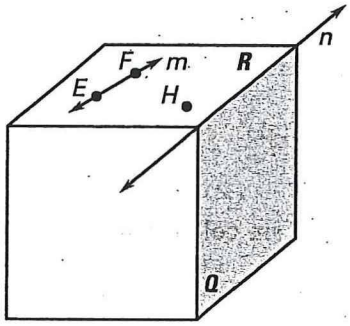
2. If two points lie in a plane, then the line containing them lies in the plane.

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).

Postulate 8: 3 noncollinear points lie in a plane



5. The points E and F lie on a line (labeled m).

Postulate 5: Through any 2 points there exist exactly one line.

6. The planes Q and R intersect in a line (labeled n).

Postulate 11: 2 planes intersect at a line.

7. The points E and F lie in a plane R. Therefore, line m lies in plane R.

Postulate 10: If 2 points lie in a plane, then the line containing them lies in the plane.

Name _____ Date _____

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

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*.

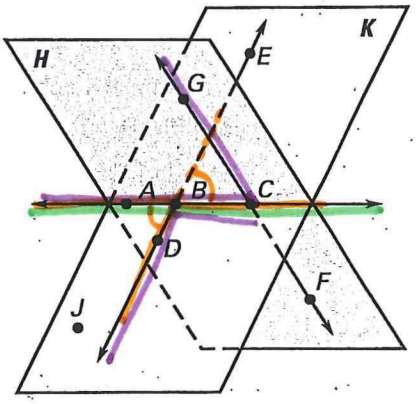
8. Is there more than one line that contains both points A and B?

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?

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.

True, Plane K

13. $\angle EBA$ is a right angle.

False, does not have ⊾ symbol

14. Points E, G, and A are collinear.

False, not on the same line

15. $\overleftrightarrow{FG} \perp$ plane H

False, no ⊾ and it on Plane H

16. $\angle ABD$ and $\angle EBC$ are vertical angles.

True

17. Planes H and K intersect at $\overleftrightarrow{AB}$.

True

18. $\overleftrightarrow{FG}$ and $\overleftrightarrow{DE}$ intersect.

False, $\overleftrightarrow{FG}$ intersects $\overleftrightarrow{AC}$ at C and $\overleftrightarrow{DE}$ intersects $\overleftrightarrow{AC}$ at B

19. $\angle GCA$ and $\angle CBD$ are congruent angles.

False, no ≅ sign (arc), not VA