

Name \_\_\_\_\_

Date \_\_\_\_\_

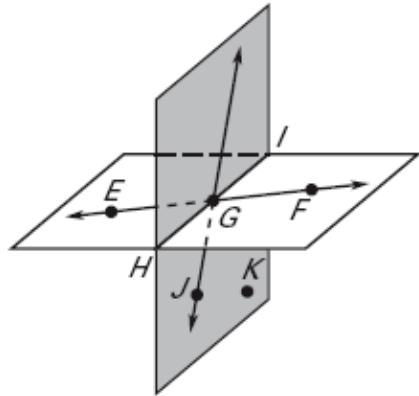
**LESSON 1.1**

**Practice B**

*For use with pages 2–8*

Use the diagram to decide whether the given statement is *true* or *false*.

1. Points  $H$ ,  $I$ , and  $G$  are collinear.
2. Points  $H$ ,  $I$ , and  $J$  are coplanar.
3.  $\overrightarrow{EG}$  and  $\overrightarrow{FG}$  are opposite rays.
4. All points on  $\overrightarrow{GI}$  and  $\overrightarrow{GF}$  are coplanar.
5. The intersection of  $\overleftrightarrow{EF}$  and plane  $JKH$  is  $\overleftrightarrow{HI}$ .
6. The intersection of  $\overleftrightarrow{EF}$ ,  $\overleftrightarrow{HI}$ , and  $\overleftrightarrow{JG}$  is point  $G$ .
7. The intersection of plane  $EGH$  and plane  $JGI$  is point  $G$ .
8. The intersection of plane  $EFI$  and plane  $JKG$  is  $\overleftrightarrow{HG}$ .



Sketch the figure described.

9. Two rays that do not intersect

10. Three planes that intersect in one line

11. Three lines that intersect in three points

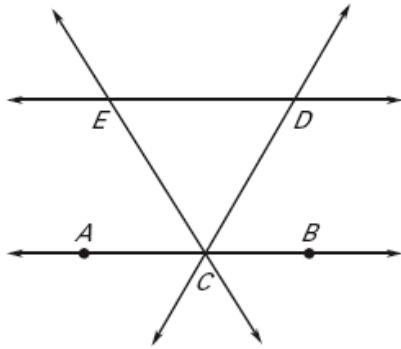
12. A ray that intersects a plane in one point

**In Exercises 13–15, use the diagram.**

13. Name 12 different rays.

14. Name 2 pairs of opposite rays.

15. Name 3 lines that intersect at point  $C$ .



16. Draw four noncollinear points  $A$ ,  $B$ ,  $C$ , and  $D$ . Then sketch  $\overline{AB}$ ,  $\overrightarrow{BC}$ , and  $\overleftrightarrow{AD}$ .

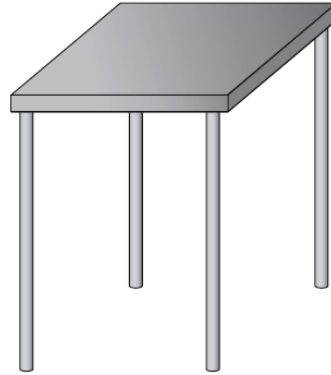
17. Sketch plane  $M$  intersecting plane  $N$ . Then sketch plane  $O$  so that it intersects plane  $N$ , but not plane  $M$ .

**18. Counter Stools** Two different types of stools are shown below.

- a. One stool rocks slightly from side to side on your kitchen floor. Which of the two stools could this possibly be? *Explain* why this might occur.
- b. Suppose that each stool is placed on a flat surface that is slightly sloped. Do you expect either of the stools to rock from side to side? *Explain* why or why not.



Three-legged stool



Four-legged stool