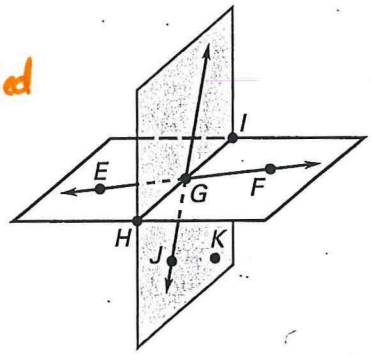
Name _____ Date _____

LESSON 1.1

Practice

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

Sketch the figure described.

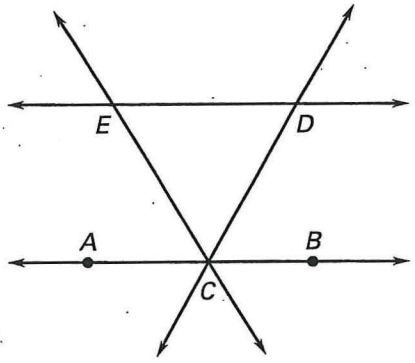
9. Two rays that do not intersect

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.

$\overrightarrow{AB}$ $\overrightarrow{BA}$ $\overrightarrow{CD}$ $\overrightarrow{CB}$ $\overrightarrow{DC}$ $\overrightarrow{ED}$
$\overrightarrow{AC}$ $\overrightarrow{BC}$ $\overrightarrow{CE}$ $\overrightarrow{CA}$ $\overrightarrow{DE}$ $\overrightarrow{EC}$

14. Name a pair of opposite rays.

$\overrightarrow{CA}$ and $\overrightarrow{CB}$

15. Name 3 lines that intersect at point C.

$\overleftrightarrow{EC}$, $\overleftrightarrow{BC}$, $\overleftrightarrow{CD}$

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LESSON 1.1 **Practice** *continued*
For use with pages 2–8

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.

You are given an equation of a line and a point. Use substitution to determine whether the point is on the line.

18. $y = 5x + 3$; $A(1, 8)$ (x y)
$8 = 5(1) + 3$
$8 = 5 + 3$
$8 = 8$ ✓ yes

19. $y = -x + 3$; $A(6, 3)$ (x y)
$3 = -(6) + 3$
$3 = -6 + 3$
$3 \neq -3$ NO

20. $y = -3x - 6$; $A(2, 0)$

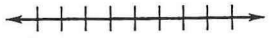
21. $2x - y = 7$; $A(3, -1)$

22. $x + 6y = 40$; $A(-10, 5)$

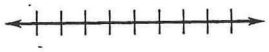
23. $-x - 4y = -14$; $A(-6, 2)$

Graph the inequality on a number line. Tell whether the graph is a *segment*, a *ray* or *rays*, a *point*, or a *line*.

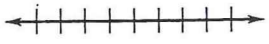
24. $x \geq 2$



25. $2 \leq x \leq 5$



26. $x \leq 0$ or $x \geq 8$



27. $|x| \leq 0$