

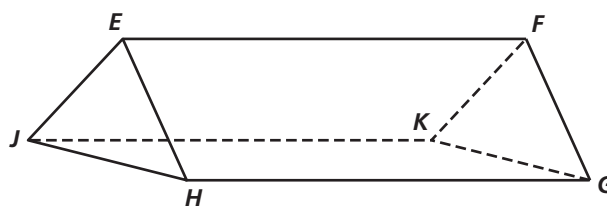
# Practice 1-4

## Segments, Rays, Parallel Lines, and Planes

Write *true* or *false*.

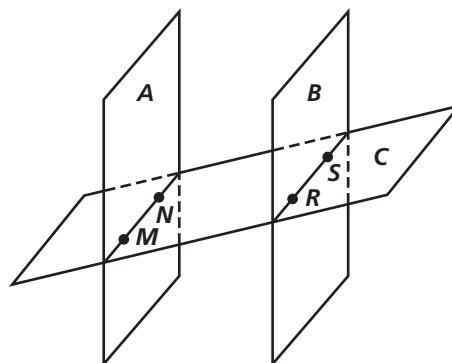
- $\overleftrightarrow{XY}$  is the same as  $\overleftrightarrow{YX}$ .
- $\overrightarrow{XY}$  is the same as  $\overrightarrow{YX}$ .
- If  $\overrightarrow{AB}$  and  $\overrightarrow{AC}$  are opposite rays, then they are collinear.
- If two rays have the same endpoint, then they form a line.
- If the union of two rays is a line, then the rays are opposite rays.
- If  $\overrightarrow{PQ}$  and  $\overrightarrow{PR}$  are the same rays, then  $Q$  and  $R$  are the same point.

Refer to the diagram at the right.



- Name all segments parallel to  $\overline{EF}$ .
- Name all segments parallel to  $\overline{FG}$ .
- Name three pairs of skew lines.

Refer to the diagram at the right.



- Which pair(s) of planes is (are) parallel?
- Which pair(s) of planes intersect?
- Which planes intersect in  $\overleftrightarrow{MN}$ ?
- Which planes intersect in  $\overleftrightarrow{RS}$ ?

Refer to the diagram at the right.



- Name  $\overrightarrow{EF}$  in another way.
- How many different segments can be named?
- Name a pair of opposite rays with  $E$  as an endpoint.
- Name in two different ways the ray opposite  $\overrightarrow{FG}$ .
- Name  $\overrightarrow{GE}$  in two other ways.
- Are  $\overline{EG}$  and  $\overline{GE}$  the same segment?

Draw each of the following.

- parallel planes  $S$ ,  $T$ , and  $U$
- planes  $R$  and  $W$  intersecting in  $\overleftrightarrow{PQ}$