Math 1

# **Unit 6.1 Points, Lines, and Planes PRACTICE**

1. Name a line that is not contained in plane  $\mathcal{N}$ .

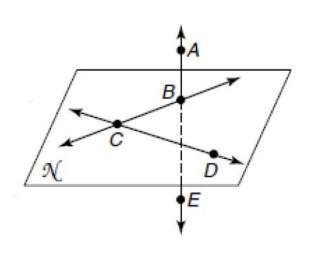
- 2. Name two different ways to name a plane that contains point B.
- 3. Name three collinear points.
- 4. Name two lines that intersect and the point where they intersect.
- 5. Name a set of opposite rays.
- 6. Names **ALL** the planes.
- 7. Name three collinear points.
- 8. Are points N, S, R, and W coplanar?

Why?

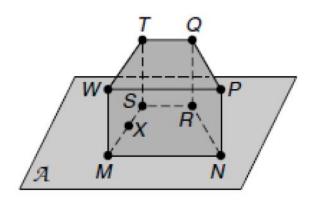
- 9. What is another way to name Plane  $\mathcal{A}$ ?
- 10. Where do  $\overrightarrow{QR}$  and  $\overrightarrow{SR}$  intersect?
- 11. Name two lines and their intersections? (Other than the lines from question 10).

Determine whether each statement is *always, sometimes,* or *never* true.

- 12.  $\overrightarrow{TQ}$  and  $\overrightarrow{QT}$  are the same line.
- 13.  $\overrightarrow{JK}$  and  $\overrightarrow{JL}$  are the same ray.
- 14. Intersecting lines are coplanar.
- 15. Four points are coplanar.
- 16. A plane containing two points of a line contains the entire line.
- 17. Two distinct lines intersect in more than one point.



Period: \_



#### Name:

#### Complete the figure below to show the following relationship.

18. Lines  $\ell$  and m, and n are coplanar and lie in plane Q.

Lines  $\ell$  and m intersect at point P.

Line n intersects line m at R, but does not intersect line  $\ell$ .



### Complete the figure below to show the following relationship.

19. Plane  $\mathcal{R}$  contains line  $\overrightarrow{AB}$  and  $\overrightarrow{DE}$ , which intersect at point P.

Add point C on plane  $\mathcal{R}$ , so that it is not collinear with  $\overleftrightarrow{AB}$  and  $\overleftrightarrow{DE}$ .



## Complete the figure at the right to show the following relationship.

20.  $\overrightarrow{AB}$  is in plane Q.

 $\overrightarrow{ST}$  intersects  $\overrightarrow{AB}$  at P.

Point X is collinear with points A and P.

Point Y is not collinear with points T and P.

Line  $\ell$  contains points X and Y.

