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$\qquad$

### 14.1 Points, Lines, Planes and Intro to Quads

Name each point, line segment, line, or ray.
1.

2.
3.
$\stackrel{\rightharpoonup}{\mathrm{S}}$

$\stackrel{\ominus}{\mathrm{T}}$
4.

5.

6.


Draw and label each of the following.
7. $\overleftrightarrow{A B}$
8. Points $C$ and $D$
9. $\overleftrightarrow{J K}$

Identify each figure as parallel, perpendicular, or neither. Include the type of slope each would have
10.
11.

12.


Draw and label each of the following.
13. $\overleftrightarrow{\mathrm{LM}}$ intersects $\overleftrightarrow{N O}$ at point $P$
14.
.$~ \overleftrightarrow{\mathrm{HI}}$ is perpendicular to $\overleftrightarrow{J K}$
15.
$\overleftrightarrow{\mathrm{RS}}$ is parallel to $\overleftrightarrow{\mathrm{TU}}$

Fill in the blanks:
16. Through any two points there exists exactly one $\qquad$ .
17. A line contains at least $\qquad$ points.
18. If two lines intersect, then their intersection is exactly $\qquad$ point(s).
19. Through any $\qquad$ noncollinear points there exists exactly one plane.
20. A circle is created by connecting all the points $\qquad$ from the center.
21. On a circle, the distance from the center to ANY point on the "ring" is called the
$\qquad$ _.

Refer to the figure below for questions \# 22-31:

## True or False:

22. Points $Q, P$, and $L$ are on the same plane, even though it is not shown.
23. Points $K, L$, and $Q$ are on the same line.
24. The intersection of $\overrightarrow{Q P}$ and Plane $R$ is point $J$.
25. Let $J$ be the center of a circle with a radius of JL. This circle intersects both planes.
26. Points $Q$, J, and $N$ form an angle named $\angle J L Q$.
27. Line LN lies in Plane $R$.
28. Point $M$ is on the edge of Plane $R$.

Answer these questions:
29. The answer to \#22 is TRUE. Why? $\qquad$
30. The answer to \#28 is FALSE. Why? $\qquad$
31. The answer to \# 26 is FALSE. Why and what is the correct name of the angle formed?

## True or False

32. Two points determine two lines.
33. Two planes always intersect in a line.
34. If two distinct lines intersect, they always intersect at a point.
35. Three points determine a plane.
