# Honors Geometry Notes Section 1.1 Identify Points, Lines and Planes 

## Vocabulary

Point: 1) a location in space
2) no dimension
3) single capital letter

Line: 1) continuous set of points
2) 1 dimensional
3) 2 capital letters / 1 lowercase cursive

Plane: 1) continuous set of 20 points
2) 2 dimensional
3) single capital cursive letter / 3 capitals

Collinear:

Coplanar: points in the same plane

Noncollinear: points not on the same line

Noncoplanar: points not in the same plane
(Line) Segment: a line with 2 endpoints; 2 capital letters

Ray:
part of a line with 1 endpoint; 2 capital letters (order matters)

Opposite Rays:
2 rays that have a common endpoint $\varepsilon$ form a line

Intersect:
when 2 or more figures have a point or points in common; $\qquad$
the set of points the figures have in common


## Examples

1a) Give 2 names for $P Q$ and for plane $R$
b) Name 3 points that are collinear

Name 4 points that are coplanar
Name 4 points that are noncoplanar


2a) Give another name for GH.
b) Name all rays with endoint $\mathbf{J}$ $\qquad$
Name a set of opposite rays
3. Sketch the following.
a) a line in a plane
b) a line that does not intersect the plane
c) a line that intersects plane at 1 point
4) Name the intersection.
a) $\overline{P Q}$ and $\overleftrightarrow{k}$
b) plane $A$ and plane $B$
c) line $k$ and plane $A$



