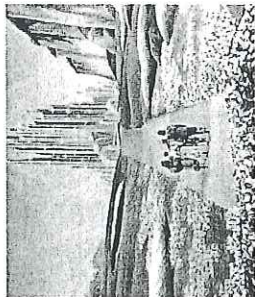


1-1 Points, Lines, and Planes (oh my)

A. "Undefined Terms"

Like the parts of an atom these make up the building blocks of geometry

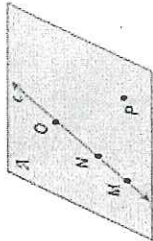


1. Point - A location

Definitions on Page 6

1-1 Points, Lines, and Planes

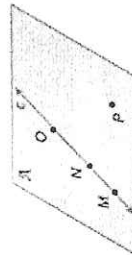
2. Line - made up of points & has no width or thickness



3. Plane - flat surface, at least 3 noncollinear pts

B. Collinear and Coplanar

- * "Co" - together
- * "Linear" - line
- * "Planar" - flat surface
- * Collinear - pts that lie on same line
- * Coplanar - pts that lie on same plane



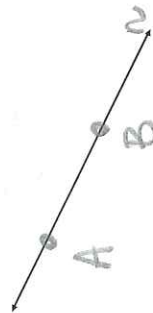
C. Naming Lines and Planes

Lines

- * 2 methods

* line n, line AB

* \overleftrightarrow{AB}



Planes

- * 2 methods

* plane γ

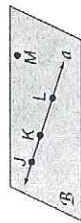
* plane XYZ



NON-COLLINEAR

Example #1

Use the figure to name each of the following.



- a. A line containing point K *line a, JK, KL, JL, ...*
- b. A plane containing point L *plane B, plane JKM*

what about plane JKL?

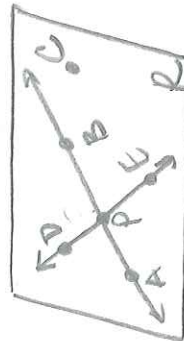
Example #2

Name the geometric shape modeled by each object.

- a. The long hand on a clock *line segment*
- b. A 10 x 12 patio *plane*
- c. The location where the corner of a driveway meets the road *point*

Example #3

- Draw and label a figure given that plane R contains lines \overleftrightarrow{AB} and \overleftrightarrow{DE} , which intersect at point P. Add point C on plane R so that it is not collinear with \overleftrightarrow{AB} or \overleftrightarrow{DE} .



Example #4

- How many planes appear in this figure? *4*
- Name three points that are collinear. *D, G, B*
- Are points G, A, B, and E coplanar? Explain. *NO, A, G, B are coplanar but E does not lie on the same plane*
- At what point do \overleftrightarrow{EF} and \overleftrightarrow{AB} intersect? *They do not intersect*

