

Course: Geometry

Name:

Lesson 1.1: Points, Lines, and Planes

Due:

Learning Target:

1-1: I can understand and use the basic undefined and defined terms in geometry. (G.CO.1)

Questions:

Definition:

Undefined Terms:

Point:

Line:

Plane:

Collinear points:

Coplanar points:

Line segment (_____):

Endpoints:

Ray:

Initial point:

Opposite rays:

Intersect:

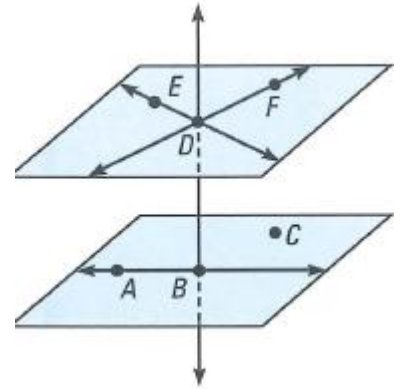
Intersection:

Notes Summary:

Practice Problems 1.1

Describe what each of these symbols mean AND draw a picture to represent the symbol:		
1.) \overline{PQ}	2.) \overrightarrow{PQ}	3.) \overleftarrow{PQ}
4.) \overrightarrow{QP}	5.) P	6.) PQR
7.) Sketch a line that contains point R between points S and T.		
Decide whether each statement below is TRUE or FALSE based on your sketch in #7 above. Be sure to <i>justify</i> your answer. (Explain why it is true or false.)		
8.) \overrightarrow{SR} is the same as \overrightarrow{ST} .	9.) \overleftarrow{SR} is the same as \overleftarrow{RT} .	10.) \overrightarrow{RS} is the same as \overrightarrow{TS} .
11.) \overrightarrow{RS} and \overrightarrow{RT} are opposite rays.	12.) \overrightarrow{ST} is the same as \overrightarrow{TS} .	13.) \overrightarrow{ST} is the same as \overrightarrow{TS} .

Decide whether the statements below are true or false based on the diagram.
Give a reason for your choice.



14.) Points A, B, and C are collinear.

15.) Points A, B, and C are coplanar.

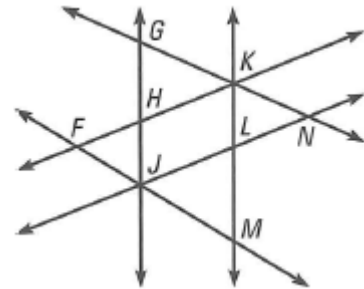
16.) Point F lies on \overleftrightarrow{DE} .

17.) \overleftrightarrow{DE} lies on plane DEF.

18.) \overleftrightarrow{BD} and \overleftrightarrow{DE} intersect.

19.) \overleftrightarrow{BD} is the intersection of plane ABC and plane DEF.

Name a point that is collinear with the given points.



20.) F and H

21.) G and K

22.) K and H

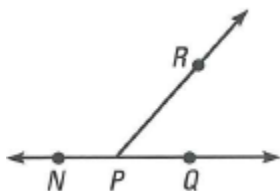
23.) M and J

24.) J and F

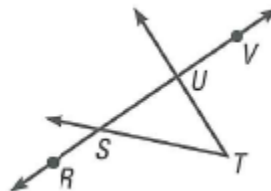
25.) H and G

Name three points in the diagram that are **NOT** collinear.

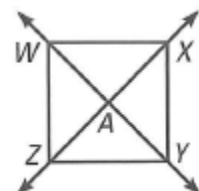
26.)



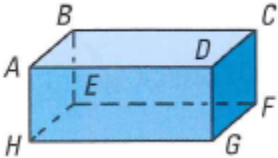

27.)



28.)



Application Problems 1.1

Name a point that is coplanar with the given points. Use the diagram below right.		
1.) A, B, and C	2.) C, D, and F	
3.) E, F, and G	4.) B, C, and F	5.) B, C, and G
Name all points that are <i>NOT</i> coplanar with the given points.		
6.) S, P, and M	7.) R, S, and L	
8.) R, K, and N	9.) Q, K, and L	10.) P, S, and K
Name the geometric figure with the given dimensions AND a possible real-world model for this figure.		
11.) no dimension	12.) one dimension	13.) two dimensions
What kind of geometric intersection does the photograph suggest? Name the geometric figures that are intersecting AND the type of figure that the intersection makes.		
14.)	15.)	16.)
