Name Key Date _____

Classify each statement as true or false.

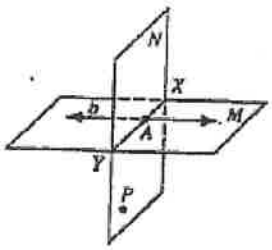
1. $\overleftrightarrow{PF}$ ends at P. F
2. Point S is on an infinite number of lines. T
3. A plane has no thickness. T
4. Collinear points are coplanar. T
5. Planes have edges. F
6. Two planes intersect in a line segment _____ Technically a line
7. Two intersecting lines meet in exactly one point. T
8. Points have no size. T
9. Line XY can be denoted as $\overleftrightarrow{XY}$ or $\overleftrightarrow{YX}$. T
10. All points on a line are coplanar. T
11. A line has one endpoint. F
12. A point is named by a capital letter. T
13. Two lines intersect in two points. F
14. The edge of a plane is a line. F planes don't have edges

Fill in the blank with *always*, *sometimes* or *never*.

1. The length of a segment is N negative.
2. If a point S is between points R and V, then S A lies on $\overleftrightarrow{RV}$.
3. A coordinate can A be paired with a point on a number line.
4. A bisector of a segment is S a line.
5. A ray N has a midpoint.
6. Congruent segments A have equal lengths.
7. $\overrightarrow{AB}$ and $\overrightarrow{BA}$ N denote the same ray.

Determine if each statement is true or false.

1. P is in M. F
2. b is in M. T
3. $\overleftrightarrow{YX}$ contains P. F
4. M contains $\overleftrightarrow{YX}$. T
5. A is on b. T
6. A and P are in M. F
7. N contains P. T



1. Are A, D, and E collinear? If so, name the line they are on.

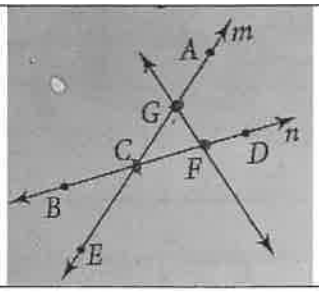
NO

2. Are B, C, and F collinear? If so, name the line they are on.

ℓ, $\overleftrightarrow{BC}$, etc...

3. Name $\overleftrightarrow{CA}$ three other ways.

m, $\overleftrightarrow{GA}$, $\overleftrightarrow{EA}$, etc...



Name the intersection of:

1. Plane UVR and plane XWV. $\overline{UV}$

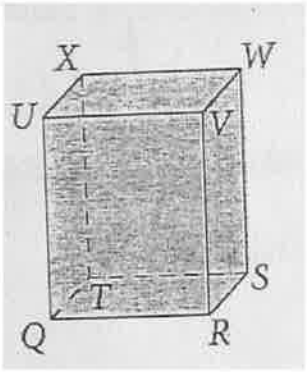
2. Plane UXQ and plane XWS. $\overline{XT}$

3. Plane UVR, plane XUW, and plane WSV. V

Name:

4. All lines (segments) parallel to $\overline{SR}$ $\overline{QT}$, $\overline{UX}$, $\overline{VW}$

5. Two lines skew to $\overline{UQ}$ $\overline{VW}$, $\overline{TS}$, etc.



Determine if each of the following pairs of items represent the thing. If not, explain.

1. $\overline{AB}$ *and* $\overline{BA}$ Y same

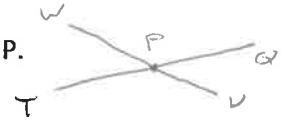
2. $\overleftrightarrow{LM}$ *and* $\overline{LM}$ N line vs segment

3. $\overrightarrow{YX}$ *and* $\overrightarrow{XY}$ N Diff end pts + direction

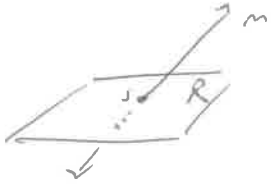
Draw and accurately label the following:

1. A, B, and C are collinear. D is non-collinear to A, B, and C.

2. Segment TQ and segment VW intersect at P.



3. Line m intersects plane R and point S.



Name THREE (3) points that are COLLINEAR.

Name TWO (2) lines that are COPLANAR.

Name THREE (3) points that are NOT COLLINEAR.

Name FOUR (4) points that are NOT COPLANAR.