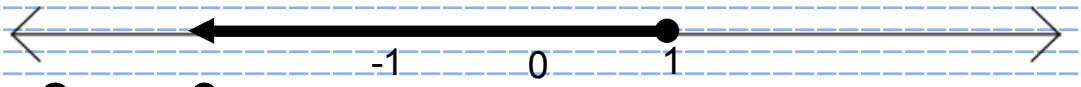
Bellwork
08/17/2011

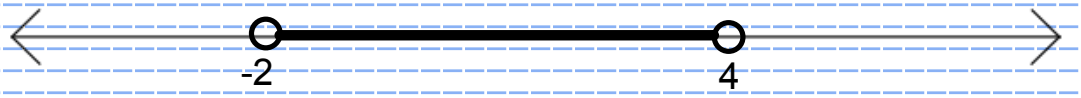
Graph each inequality.

1. $x \leq 1$



2. $-2 \leq x \leq 3$

3. $4 > -2x > -8$



Geometry
1.1 Identify Points, Lines, and Planes
Standard(s): 3, 8

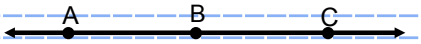
Vocabulary:

1. Point: a point has no dimension (represented by a dot).

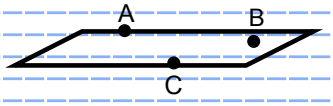
2. Line: a line has one dimension (represented by a line with two arrowheads, but it extends without end).

3. Plane: a plane has two dimensions (represented by a shape that looks like a floor, but extends without end).

4. Collinear points: points that lie on the same line.



5. Coplanar points: points that lie in the same plane.

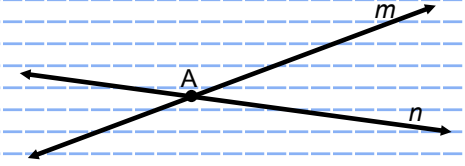


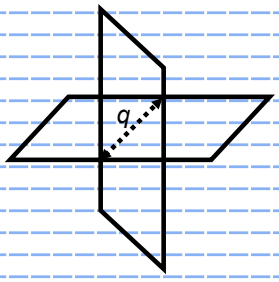
6. Segment: a line segment between two endpoints.

7. Ray: A segment that extends infinitely on one end.

8. Opposite Rays: If point C lies on line $\overleftrightarrow{AB}$ between A and B, then $\overrightarrow{CA}$ and $\overrightarrow{CB}$ are opposite rays.

9. Intersection: The set of points two or more figures have in common.





Naming Points, Lines, and Planes

A. Give two other names for $\overleftrightarrow{BD}$.

Line *m*, $\overleftrightarrow{DB}$

B. Give another name for plane T.

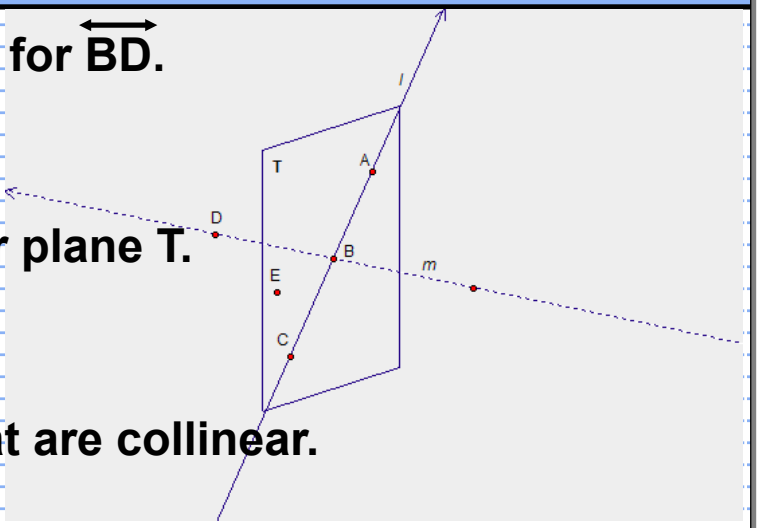
plane AEC

C. Name three points that are collinear.

A, B, C

D. Name four points that are coplanar.

A, B, E, C



Naming Segments, Rays, and Opposite Rays

A. Give another name for $\overline{PR}$.

$\overline{RP}$

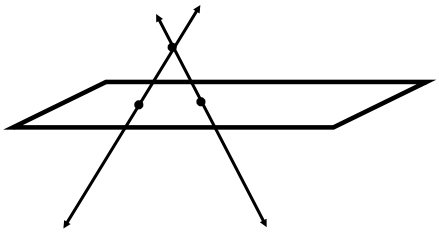
B. Name all the rays with endpoint Q.
Which of these rays are opposite rays?

$\overrightarrow{QP}$, $\overrightarrow{QR}$, $\overrightarrow{QS}$, $\overrightarrow{QT}$

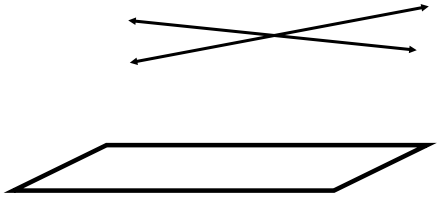
Opposite Opposite

Sketch Intersections of Lines and Planes

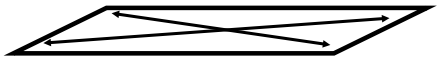
A. Sketch a plane and two intersecting lines that intersect the plane at separate points.



B. Sketch a plane and two intersecting lines that do not intersect the plane.



C. Sketch a plane and two intersecting lines that lie in the plane.

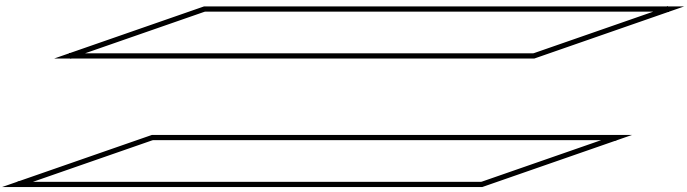


*** Can a line intersect a plane in only two points? Why or why not?**

No, that would look like a parabola, which is not a line.

Sketching Intersections of Planes

Sketch two planes that do not intersect in a line.



*** Can two planes intersect in a segment? Why or why not?**

No, because a plane extends infinitely. Therefore, their line of intersection extends infinitely.

Homework Assignment

Worksheet 1.1B