

Homework

Instructions: For page one, read text, Section 1.1, pages 5-12 and complete below.  
 For pages 2-3, use "Basics of Geometry Power Point #1" on Ms. Williams' website.  
 For page 4, section two, use "Basics of Geometry Power Point #2."

Find and copy the definitions/postulate/formulas.

Vocabulary

building  
block

1. "Undefined term" means: most basic figures in geometry; cannot be defined using other figures.
2. Between: an undefined term; a point with other points on both sides.
3. Ray: a portion of a line; has one endpoint; continues forever in one direction.
4. Postulate: a statement that is accepted as true w/o proof.
5. Construction: a geometric drawing that is an accurate copy; done w/o numbers or measurements.

building  
block

Postulate

6. Segment addition postulate (seg add post):

If A, B, C are 3 collinear points, and B is between A and C, then  $AB + BC = AC$

FORMULAS

7. Distance formula

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

8. Midpoint formula

$$M \left( \frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2} \right)$$

• think averages

Name: \_\_\_\_\_ Date: \_\_\_\_\_




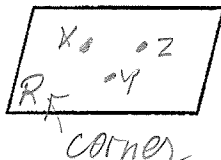
Honors Geometry: Basics of Geometry Introductory Vocabulary

Section One - Use "Basics of Geometry Power Point #1"

The three undefined terms in geometry are:



point      line      plane

Undefined Terms




Term	Symbolic Notation Used	Sketch
<p>Point</p> <p><i>has no dimension</i></p>	<p>Capital Letter ie: A</p>	
<p>Line</p> <p><i>has one dimension</i> <i>extends forever both directions; line l</i></p>		
<p>Plane</p> <p><i>has 2 dimensions</i> <i>extends forever in all directions</i></p>	<p>plane XYZ</p> <p>plane R</p>	

Think about the word Coauthors- using your understanding of what it means to be a coauthor, what do you think the word **co** means? How can you use this understanding to help you remember what collinear and coplanar mean?

Collinear/Coplanar

Term	Definition	Sketch
<p>Collinear</p>	<p>Points that lie in the same line</p>	
<p>Coplanar</p>	<p><i>Points that lie in the same plane.</i></p>	

Note of symbolic notation and sketches

Term	Symbolic Notation Used	Sketch
Segment	$\overline{AB}$	
Ray	$\overrightarrow{AB}$	Label initial point 
Opposite Rays	Name the two rays formed: $\overrightarrow{BC}$ $\overrightarrow{BA}$	

Intersect/Parallel/Congruent

Term	Definition	Questions
Intersect/Intersection	Figures intersect if they have more than one point in common	How do two lines intersect? <i>meet at a point</i> What is formed at the intersection of two planes? <i>a line</i>
Parallel	<i>Lines that lie on <u>same plane</u> but do not intersect.</i>	If two lines on the same plane aren't parallel, do they necessarily need to intersect? Explain. <i>Yes. Lines travel forever. On the same plane, they are either parallel or intersect.</i>
Congruent	Two things are congruent when they are exactly the same in size and shape.	How can you use the definition of congruent to describe the definition of a midpoint? <i>A <u>MIDPOINT</u> is a pt that divides a segment into 2 <u>CONGRUENT</u> segmts.</i>

Section Two -

Term	Symbolic Notation Used	Sketch
Angle	Give three names for the angle	Label your diagram including vertex and sides

Angles

Term	Measure	Sketch
Acute		
Obtuse		
Right		
Straight		