

BE - Geometry 1 -

Monday 8-15-11

• Find assigned seat please!

Thank you !!

MR. CANTLIN

• Welcome / Intro.

• Help / ReDO

• Seats on Time

Pencils / Payer (Books can go home)

Homework

Do WHAT you ARE supposed to do.

* Flash Cards!

• 1st 5 or 6 weeks $\Rightarrow$ AHSGE Review

Some ⁺ ACT Review

⁺ Geometry Topics "ON THE WAY"

1.
Geometry
Earth Measure

Euclid, ~ 300 BC

Greek Mathematician

Book "Elements" one of the
most influential books ever written.

Used as textbook for > 2000 years!

Euclidean vs Non-Euclidean Geometry

13 "Books"

Constructions $\Rightarrow$ straight edge & compass
(no measures with a ruler)
length $\Rightarrow$ equal or not equal

Important Parts of Euclid's Elements

Axioms and Postulates: Basic assumptions, ideally things that are obvious or given. Accepted as true without proof. Self-evident facts used as a starting point to deduce other facts.

Euclid's 5 Postulates:

1. It is possible to draw a straight line from any point to any other point.
2. It is possible to extend a line segment continuously in a straight line.
3. It is possible to describe a circle with any center and any radius.
4. It is true that all right angles are equal to one another.
5. That, if a straight line falling on two straight lines make the interior angles on the same side less than to right angles, the two straight lines, if produced indefinitely, meet on that side on which are the angles less than the to right angles. (*this is the biggie -- called the "Parallel Postulate"*)

Euclid's 5 Axioms:

1. Things which are equal to the same thing are also equal to one another.
2. If equals be added to equals, the wholes are equal.
3. If equals be subtracted from equals, the remainders are equal.
4. Things which coincide with one another are equal to one another.
5. The whole is greater than the part.

Theorems: a statement proven based on axioms or other theorems.

Definitions: describe the exact meaning of the terms used in the theorem.

Proposition: used for the statement part of a theorem.

Homework:

- ① 2 Forms done — make sure parents read.
 - ② Visit/explore BulldogMATH.com
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NOTE: Forms $\leq$ TUES = Bonus

WEDS = NOTHING

$\geq$ THURS = Penalty