

Good morning:

Please do this warm up in your notebooks (not loose leaf!!)

Find the slope and all intercepts of the line $-4x + 3y - 12 = 0$

$y = mx + b$ $\frac{4}{3}$ $(0, 4)$ $(-3, 0)$

$$-4x + 3y - 12 = 0$$

$$\begin{array}{r} -4x + 3y = 12 \\ +4x \quad +4x \end{array}$$

$$3y = \frac{4x}{3} + \frac{12}{3}$$

$$y = \frac{4}{3}x + 4$$

x-int: $y = 0$

$$-4x + 3(0) - 12 = 0$$

$$-4x - 12 = 0$$

$$-4x = 12$$

$$\underline{x = -3}$$

\$\$\$Have your math fee?
I'll take it \$\$\$

What is geometry?

Quickwrite (write whatever comes to your mind in stream-of-consciousness)

(Will trade with a partner)

NOTES

From Greek:

Geo - earth;
think geography, geology

Metria - measure



Euclid of Alexandria

lived around 300 BCE (23 centuries ago)

Wrote math text, *Elements*

Used around the world as the primary textbook for geometry well into the 1900s



(Don't have to copy this page down)

Five Axioms (basic assumptions) of Euclidean Geometry **(no need to copy)**

1. A straight segment can be drawn between any two points
2. A segment can be extended indefinitely into a line.
3. Given a segment, a circle can be drawn with the segment as radius
4. All right angles are congruent (the same).
- 5*. Given a line and a point not on the line, only one line going through the point will be parallel to the given line.



The Three "Undefined Terms" of Geometry

(DO need
to copy)

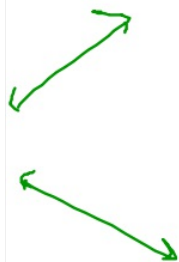
- 1, 2, 3: *point, line, plane*
- these words have no definition in geometry because they can only be explained with descriptions

two points always define a line

three non-collinear points always define a plane

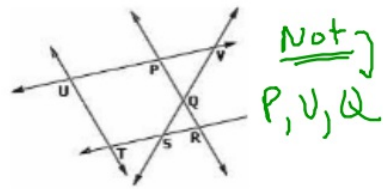


	POINT	LINE	PLANE
MODEL			
DRAWN	dot	arrowheads on each end of a segment	Slanted 4-sided shape
NAMED BY	Capital letter	<ul style="list-style-type: none">• 2 points• lowercase letter	<ul style="list-style-type: none">• 3 pts <u>not</u> in a line• Capital script letter
FACTS	No size or shape	<ul style="list-style-type: none">- continue forever in both directions- No height or width	<ul style="list-style-type: none">• Goes on forever• No length
WORDS / SYMBOLS			Plane XYZ; Plane \mathcal{N}



COLLINEAR

points on the same line

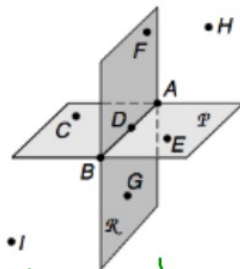


Not
P, U, Q

ex: T, S, R; P, Q, R

COPLANAR

points on the same plane



Not
C, D, F

ex: F, G; C, E

The Sketch Artist

Working with face partner

Person A and B each have 4 different figures and 2 index cards

Person A describes their card in words as accurately and specifically as possible, keeping it hidden from Person B

Person B listens carefully and draws the figure as Person A is describing. When B is done, compare the sketch to the figure :)

Then switch roles, so B describes and A sketches...and so on

<http://everybodyisageniusblog.blogspot.com/2012/07/very-funny-geometry-game.html>

Homework

p. 11 #1-4, 7, 9 (~~CO A1a~~)

