College Geometry Summer Assignment 2021

1. Your College Geometry summer assignment will be completed using the website DeltaMath.

- Create your own account for DeltaMath.com, clicking "Create Account" then typing in the teacher code: **778428**. You will make a username (email) and password, type your first and last name and select the class **College Geometry** from the dropdown menu. You'll see the assignment titled **College Geometry Summer Assignment 2021**.

- You may already have an account. If so, then sign into your old account, go to TOOLS then go to MANAGE LOGIN AND TEACHERS. Then add the teacher code **778428** and select the class **College Geometry Summer Assignment 2021**.

- If you forgot your password, you can reset it. Try to login in with your email and a random password. After one failed login, a "forgot password" link appears. If you don't get an email, you should check your junk box for the reset link.

- If you have any trouble accessing your assignment, email one of us (email at the end of this note**).** **Don't wait until the night before the first day of school to start the assignment** because that will not be enough time and we won't be able to help you if you have trouble.

2. Your summer assignment is a review of some main concepts from middle school and Algebra I.

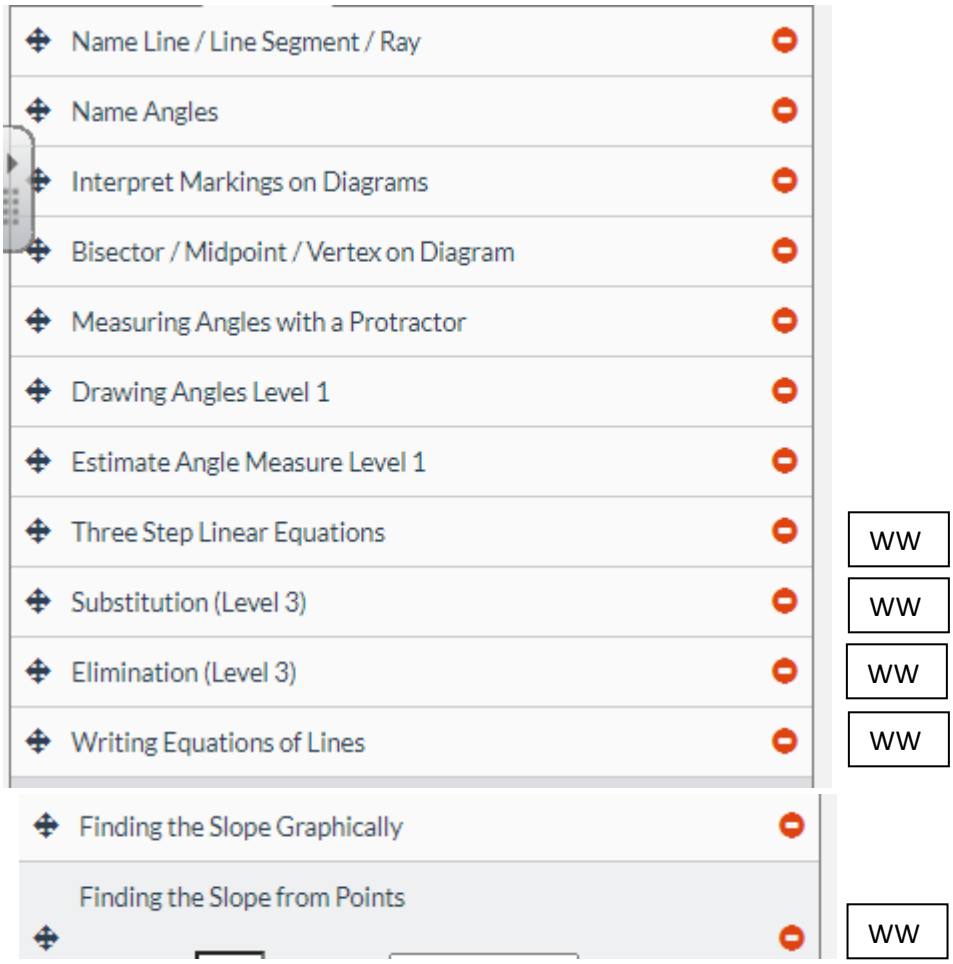
- This assignment is due on the first day of school and will count as a 10 point homework grade. It will be graded on both completeness and accuracy. In DeltaMath, each topic will list the number of problems you must get correct. You can use sample problems and watch videos in Delta Math for help. Have your pencil, paper, and calculator handy as you do this assignment. Khan Academy is also a source you can use for extra help.

- Please note that the % in upper right hand corner keeps track of your percent complete of ENTIRE ASSIGNMENT.

- Some of the topics do not require written work and some do. For the topics in which you do not need to submit written work, simply do the problems in Deltamath and continue to work until you get the number correct that is required for that problem set. For the topics that do require written work, first write the name of the topic and then number your work for each problem. If you get stuck and need help, click show solution and take notes on how to do the problem. You can also watch a video and/or look at a sample problem for additional help. Continue work until you get the number required correct. I will be able to see how many problems you try and whether you get each one right or wrong. Include the written work for the required problems along with any notes you took to help you figure out the topic.

- On the first day or school, I will collect your written work. I will use this along with your results in DeltaMath to grade your assignment.
- Along with the delta math problems, you are responsible for knowing the vocabulary words attached to this packet.

- Here is a list of all of the topics for your summer assignment. Anything with WW next to it means it requires written work that you should hand in on the first day of school.



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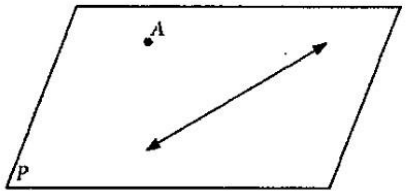
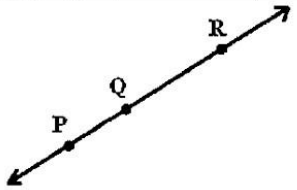
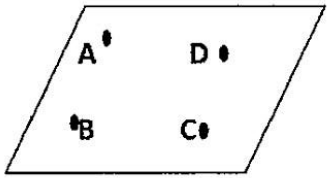
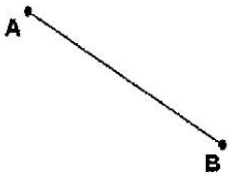
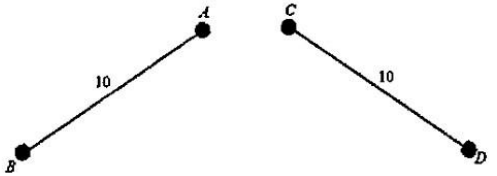
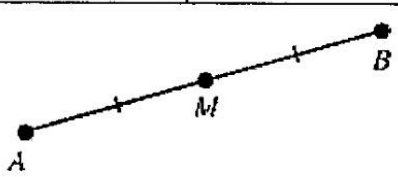
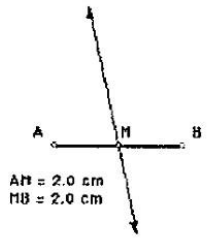
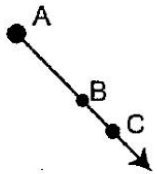
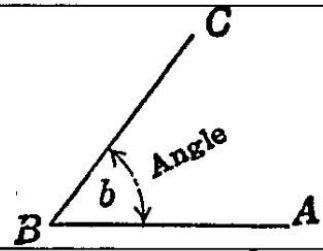
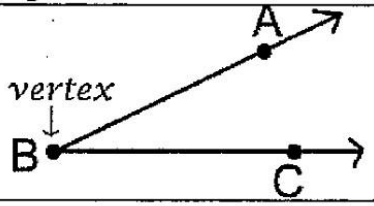
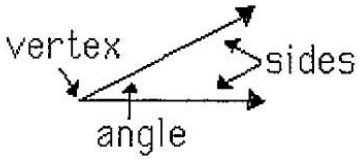
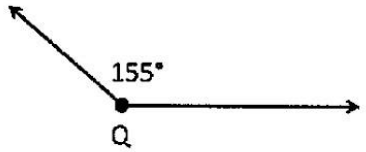
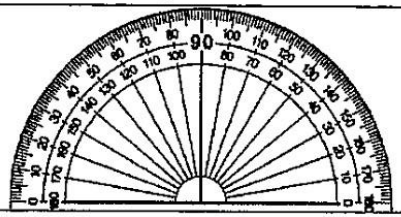
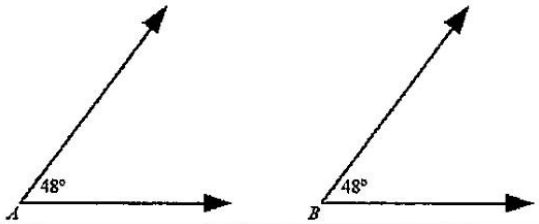
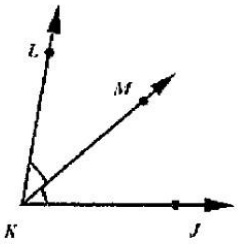
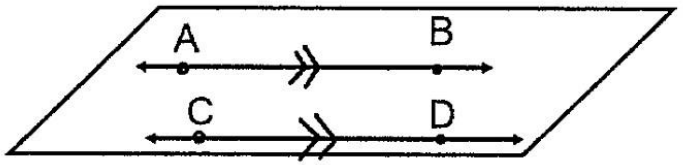
Geometry Vocabulary

#	Name	Definition	Picture/Example
1	Three Building Blocks of Geometry "undefined terms"	Point, Line, Plane	
2	Definition	Statement that clarifies or explains the meaning of a word or phrase	
3	Colinear	Two or more points on a line	
4	Coplanar	Two or more points on the same plane	
5	Line Segment	Part of a line with two endpoints	
6	Congruent segments	Two segments with the same length/ measurement	

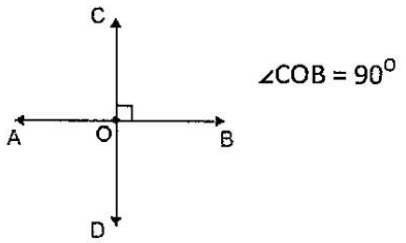
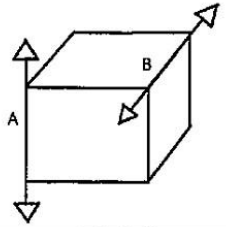
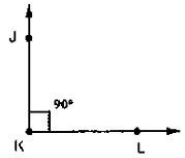
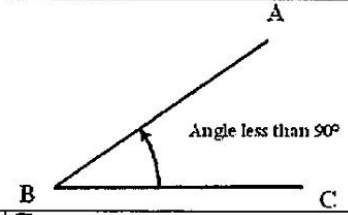
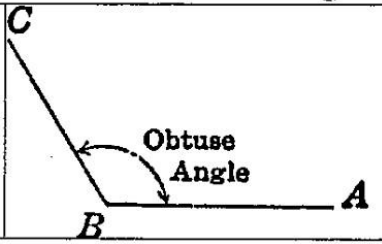
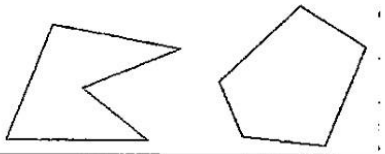
Geometry Vocabulary

#	Name	Definition	Picture/Example
7	Midpoint	A point on a segment that is equal distance from both endpoints	 Point M is the midpoint of $\overline{AB}$
8	Bisects	Something (point, line, segment, ect.) that cuts a figure into two equal parts	Point M bisects $\overline{AB}$ 
9	Ray	Part of a line with one endpoint	 Ray $\overrightarrow{AB}$ or ray $\overrightarrow{AC}$
10	Angle	Two non-colinear rays that share a common endpoint	 angle $\angle ABC$
11	Vertex of an angle	The point where the rays of the vertex meet	
12	Sides of an angle	The rays that make up the angle	

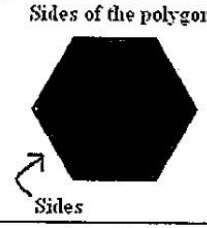
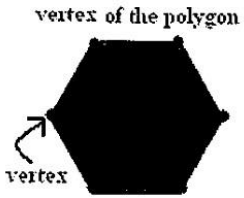
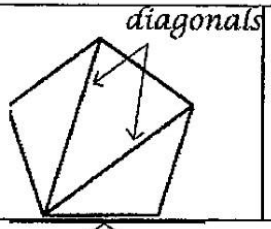
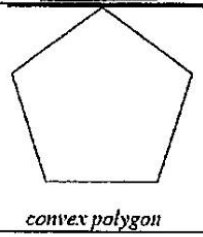
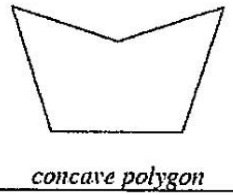
Geometry Vocabulary

#	Name	Definition	Diagram or Example
13	Measure of the angle	Smallest rotation about the vertex from one ray to another	 the smallest rotation would be 155^{o}
14	Protractor	Geometry tool to measure angles	
15	Congruent angles	Two angles with the same measurement	 ∠A≅∠B
16	Angle Bisector	A ray through the vertex of an angle that splits the angle into two congruent angles	 ∠LKJ is bisected by Ray $\overrightarrow{KM}$
17	Counter-example	An example that disproves the definition you are testing	
18	Three step to writing a good definition	1) Classify the item in a category 2)Differentiate the item from all others in that category	
19	Parallel lines	Two lines in the same plane that never intersect	 $\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$

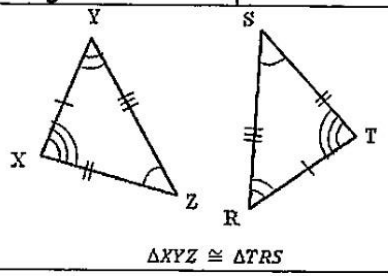
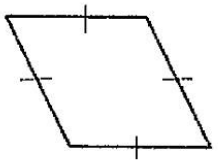
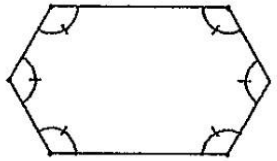
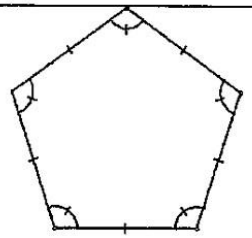
Geometry Vocabulary

#	Name	Definition	Diagram or Example
20	Perpendicular Lines	Two lines that intersect at 90°	
21	Skew Lines	Two lines in different planes that never intersect	
22	Right angle	An angle that measures 90°	
23	Acute Angle	An angle that measures less than 90°	
24	Obtuse Angle	An angle that measures greater than 90°	
25	Polygon	A closed figure made up of line segments connected endpoint to endpoint which intersect exactly two others	

Geometry Vocabulary

#	Name	Definition	Diagram or Example
26	Sides of a polygon	Line segments that make up the polygon	
27	Vertex of a polygon	The point where two sides of the polygon intersect	
28	Names of polygons by the number of sides	3- triangle 8- octagon 4- quadrilateral 9- nonagon 5-pentagon 10- decagon 6- hexagon 11 undecagon 7-heptagon 12-dodecagon	
29	Diagonal	A segment that connect two nonconsecutive vertices of a polygon	
30	Convex Polygon	A polygon where all the diagonals are inside the polygon	
31	Concave Polygon	A polygon with at least one diagonal outside the polygon	

Geometry Vocabulary

#	Name	Definition	Diagram or Example
32	Congruent polygons	Two polygons with the same size and shape	 $\Delta XYZ \cong \Delta TRS$
33	Equilateral polygon	A polygon where all the sides are the same length	
34	Equiangular Polygon	A polygon where all the angles are the same measure	
35	Regular Polygon	A polygon that is equiangular and equilateral	
36	Slope Formula	$\text{Slope} = m = \frac{rise}{run} = \frac{y_2 - y_1}{x_2 - x_1}$	

Also, please set up your binder for the first day of school.

Geometry Binder Requirement:

It is required that you get a large binder (at least 2 inches thick) with dividers. Put lined paper and graph paper in your binder.

Section 1 – Notes and homework
Section 2 – Vocabulary and formulas
Section 3 – Tests and Quizzes

In addition, you will need a zippered pouch with three holes that will hold your materials in your binder. Include the following tools:

1. At least 6 pencils
2. TI-84 calculator
3. Ruler (cm and inches, could be small)
4. Protractor
5. Compass
6. Colored Pencils

We look forward to working with you next year!

Mr. McClave and Mrs. Soundararajan

cmcclave@nwr7.org nsoundararajan@nwr7.org