2018-2019 Geometry Summer Assignment

Students in High School Geometry study transformations, congruence, similarity, special properties of triangles, quadrilaterals, & circles, volume of 3 dimensional shapes, as well as some data & probability. Throughout the course they will study formal and informal proofs, constructions using compass and straightedge as well as dynamic geometry software, and they will connect geometric ideas to what they learned last year in algebra. In May, Geometry students take the Georgia Milestones End of Course Assessment, and the score earned on that test counts as 20% of the final average in the course. Course details are available at

https://www.georgiastandards.org/Georgia-Standards/Frameworks/Geometry-Comprehensive-Course-Overview.pdf

When students go from 7th grade to Algebra 1, there are some 8th grade concepts that they miss that are fundamental to geometry concepts. Students who take 8th grade math and then Algebra 1 in 9th grade have not seen the geometry concepts for a full year, so they also need a refresher to maximize success in geometry. These standards include identifying and naming basic geometric figures, working with angles and shapes, finding area and perimeter of basic plane figures, finding volume and surface area of prisms and cylinders, transforming 2D shapes, and the Pythagorean Theorem.



Your summer work is to learn about geometry basics.



Step 1: If you do not already have a Khan Academy account, create one now at khanacademy.org/login
Step 2: On your profile page, go to the "coaches" tab and add this class code: TFQF82ZN

Step 3: In the top right corner of your screen, you will see a green circle that says you have a notification. Click the notification and "Accept Mission"

Step 4: Work your way through the videos, tutorials, and mastery challenges until you finish the mission.

This starts with an introduction, is followed by the lines, angles, shapes, area & perimeter, volume & surface area, and ends with transformations. There are several skills to master, and the website has a built-in timer so that students spread out their practice and retain knowledge better. This means that sometimes students have to wait several hours before they can do the next mastery challenge, so **don't wait until the last minute to start this assignment!** It is intended to be done slowly throughout the summer; I suggest doing 15 minutes per day, or an hour twice a week. This site is totally free, and can be easily accessed on any computer or device, including tablets and smartphones. **Students are encouraged to not to wait until the last minute!**

Completing the summer work IS for a grade!

There are other free online resources as well, including <u>www.kutasoftware.com</u>, <u>www.purplemath.com</u>, <u>www.mathisfun.com</u>, <u>www.virtualnerd.com</u>, and <u>www.ixl.com</u>, that you may find helpful in learning and mastering the concepts.

During the first week of school, all Geometry students at DFA will have a test over these topics. The test format will be mostly multiple choice, no calculator, and one constructed response question.

Please watch the videos, do the practice problems & mastery challenges, and visit the supplemental resources. Be prepared to perform your best on the test. I want you to succeed!

See you in August!

Mrs. Fuller Geometry Davidson Fine Arts