

During your summer break, the math teachers at King Middle School would like you to apply what you have learned this year toward your everyday summer life. On the back side of this paper, you will find 25 different activities that will guide you to practice some of the concepts you learned this year. You are to complete 15 of the activities and have your parent initial each square that you have completed. You will notice that some of the squares allow you to practice your math facts. www.xtramath.org is a free website where you can create a log-in and practice addition, subtraction, multiplication and division facts. When you master a set of facts, print out a certificate of completion and attach it to this sheet.

In order to receive full credit for this assignment, please attach all work to this form.

Due Date: September 2, 2016

Deadline: September 9, 2016

Once you have finished completing 15 of the 25 squares, please answer the questions below using complete sentences.

1) Which square was the easiest to complete? Why do you think it was easy for you?

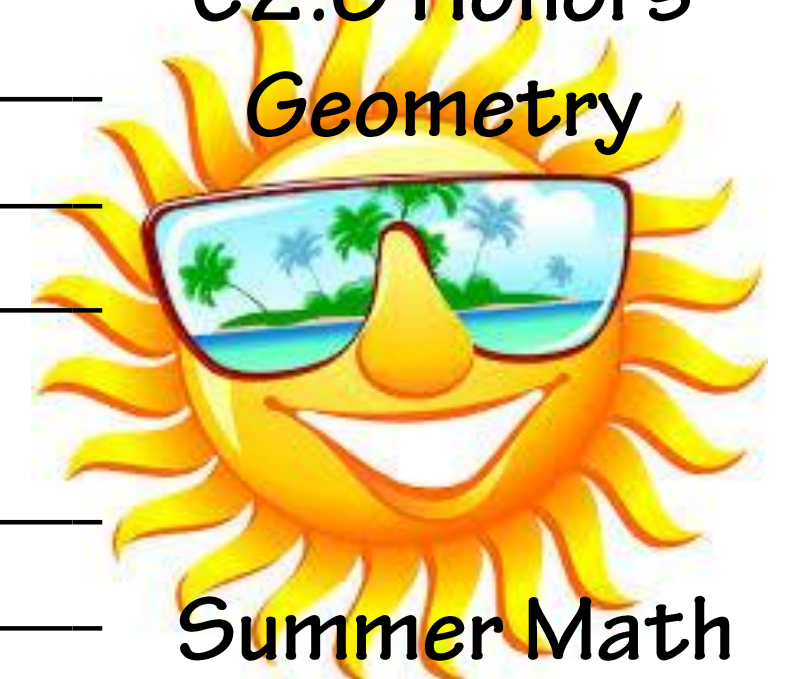
2) Which square was the most difficult to complete? Why do you think it was so challenging for you?

3) Pick a square you did not complete. Why did you choose not to complete it?

Students Entering

C2.0 Honors

Geometry



Summer Math

Homework

<p>www.mathsisfun.com/puzzles/ Click on "Logic Puzzles". Try 3 different logic puzzles write down how you figured each of them out.</p>	<p>What is the Tower of Hanoi? Research this game. Go to www.mathsisfun.com/games And type in "Tower of Hanoi" into the search bar to play. Record your results.</p>	<p>Who was Pythagoras? How was the Pythagorean Theorem derived? Research and prove how the Pythagorean Theorem works.</p>	<p>What are fractals? Research fractals. Create one by hand or on your computer</p>	<p>www.mcpsmd.org (type "Math Dude" into the search bar") Watch the Math Dude episode on factoring. Unit 6.5</p>
<p>Create 4 equations and solve, showing all work. Include a 1-step equation, a 2-step equation, an equation with variables on both sides, and an equation that includes the distributive property.</p>	<p>Which capital letters in the alphabet are symmetrical? Using graph paper, write the letters and draw the axis of symmetry on each. Which have a vertical axis of symmetry? Which have a horizontal axis of symmetry? Which have both?</p>	<p>www.mathsisfun.com/geometry/constructions Practice compass and pencil constructions. Use a combination of the constructions to create a unique design.</p>	<p>Go to www.thefutureschannel.com and click to watch the "Moorpark Zoo" short movie and the "Designing Toy Cars" clip to see how math is used in two different careers.</p>	<p>Paint your room! Calculate the area of the walls in your room and calculate how many gallons of paint it would take to paint them. Don't forget to take out the area of any windows or doors! Show all of your calculations on a piece of paper and write down the color you would use. Attach a paint sample card from your local hardware store to show the color you've chosen.</p>
<p>Create a picture pattern with 3 terms. Ask a family member or friend to draw the next 3 pictures in the pattern.</p>	<p>Construct a floor plan of your bedroom on a piece of graph paper. Draw each piece of furniture to scale. Then construct a floor plan of your dream room.</p>	<p>Create 4 equations and solve, showing all work. Include a 1-step equation, a 2-step equation, a 2-step equation with a fraction, and a 2-step equation with a decimal.</p>	<p>What is a tessellation? Research tessellations and create one by hand or on your computer.</p>	<p>www.exploratorium.edu/geometryplayground/resources.php Complete the "Tiny Pants Photo Challenge".</p>
<p>Make a list of 10 geometric shapes. Find an example of each shape in the world. Take a picture of each and create a booklet of geometric shapes</p>	<p>Log onto www.KhanAcademy.org and review a lesson on adding and subtracting polynomials. Create 10 problems and simplify showing all of your steps.</p>	<p>The formula for the volume of a rectangular prism is $V = \text{length} \times \text{width} \times \text{height}$. Calculate the volume of 3 food items whose containers are rectangular prisms (i.e. a cereal box). Compare what the box can hold the volume of food inside.</p>	<p>What is a polyhedron? Research what a regular polyhedron is. Find a favorite and create it.</p>	<p>www.museumofplay.org/flash-games/tangrams/ Create a tangram set from cardstock. Cut it out and try to put it back together to form a square. Construct 3 other shapes from the tangram set and describe what they are. Have a family member try to construct your shapes using your tangram set.</p>
<p>What is the centroid of a triangle? Research what a centroid is and construct one in a triangle. Can you balance the triangle on the tip of your pencil? Try using different sized triangles.</p>	<p>What is a hexaflexagon? Go to www.khanacademy.org and type "hexaflexagon" into the search bar. Watch the short clip and then make your own hexaflexagon.</p>	<p>Think of a geometric shape. Find as many examples of that shape in your everyday life. Take or draw a picture each time you see one. How many can you find? 10? 20? 40?</p>	<p>What is a Golden Rectangle? Research the golden ratio and all of the famous pieces of artwork and buildings that it is found in. Find an example of where it can be found in your world.</p>	<p>Log onto www.KhanAcademy.org and review a lesson on factoring. Factor the following: $x^2 - 15x + 56$ $2x^2 - 3x - 2$ $4x^2 + 15x - 4$</p>