

Middle School Summer Math Choice Board (for incoming grades 6th- 8th)

Choose three of the following activities to complete this summer for math. It must be three in a row, column, or diagonal. Due the first Friday of school.

Logic Puzzle (on page 2)	<p>The Sharks baseball team just finished a great year. During the season, they won three out of every four of their home games and two out of every three of their away games. All together they won 40 more games than they lost. Figure out the number of wins and losses.</p> <ul style="list-style-type: none">• Have you clearly shown and explained the work you did?• Did you make any mistakes along the way? If so, how did you find and fix them?• Are there any hints that you would give another student?	<p>You won a 42' yacht in a raffle, but it is in New Orleans. It cannot be moved by truck, but you need to bring it to Louisville. Make a plan to get your yacht here. What are the two ways you can go? Compare the travel time, total distance traveled, and the other associated dock and lock fees. Do not include the cost of fuel in your plan (Grandpa said he'd cover that). Your plan should provide evidence from your research to show that you have considered everything. Have a wonderful yacht trip! (Bonus point if you provide a link to the yacht that you would like to win.)</p>
<p>Research one of the following mathematicians and give a brief bio of this person, especially their math contribution to the world. One page minimum, double spaced document, correct grammar and complete sentences.</p> <p>Suggestions: Pythagoras Euclid Leonhard Euler Carl Friedrich Gauss Georg Cantor Paul Erdős Srinivasa Ramanujan Muhammad ibn Musa al-Khwarizmi David Hilbert Pierre de Fermat René Descartes</p>	<p>Summer math review (tutor) If you will be tutoring for math this summer, please have your tutor sign this box and record the number of hours they worked with you.</p> <p>Tutor Signature:</p> <p>Tutoring hours:</p>	<p>Collect some kind of data to graph and analyze. Explain why the graph you chose was the most appropriate for your data. The more data points you have the more accurate a prediction based on the data will be. What inferences can you make based on your graph and why would this be important to know?</p>
<p>Predict a budget for your family's groceries for the week. Create a grocery list for your family for the week, research prices either at the store or online. Were you able to stay within your budget?</p>	<p>Visit a math website such as Khan Academy or other to learn more about a topic covered in class this past year that you found difficult. Create a document, sharing what you learned with examples.</p>	<p>One night the King couldn't sleep, so he went down into the Royal kitchen, where he found a bowl full of mangoes. Being hungry, he took $\frac{1}{6}$ of the mangoes. Later that same night, the Queen was hungry and couldn't sleep. She, too, found the mangoes and took $\frac{1}{5}$ of what the King had left. Still later, the first Prince awoke, went to the kitchen, and ate $\frac{1}{4}$ of the remaining mangoes. Even later, his brother, the second Prince, ate $\frac{1}{3}$ of what was then left. Finally, the third Prince ate $\frac{1}{2}$ of what was left, leaving only three mangoes for the servants. How many mangoes were originally in the bowl?</p>

THE STORY

Judith, Jane, Joann, Josie and Jolene had been married for five different lengths of time. The women and their husbands went out to an anniversary dinner as a group and had different soups, entrees and desserts. Based on the clues, logically deduce who was married to whom, for how many years and what they each had for dinner.

THE CLUES

1. The woman who was married to Roger for 25 years had cabbage soup, spaghetti and a cupcake.
2. The woman who was married to Ronald for 15 years had potato soup, steak and rice pudding.
3. Josie had been married for two years longer than Jane; Jolene had been married longer than Judith; and Jolene wasn't married to Roger.
4. Roy had been married for two years longer than Raymond, and Richie had been married for two years longer than Roy.
5. Josie had been married for more than 18 years, and Jolene had been married for less than 18 years.
6. The woman married to Roy didn't order the tomato soup or the onion soup.
7. Chicken and ice cream were eaten with the tomato soup, and Jane did not order the fish or the cheesecake.
8. Jolene never orders ice cream because it gives her a headache.

Judith	Jane	Joann	Josie	Jolene
Roger Raymond Richie Ronald Roy	Roger Raymond Richie Ronald Roy	Roger Raymond Richie Ronald Roy	Roger Raymond Richie Ronald Roy	Roger Raymond Richie Ronald Roy
25 years 20 years 18 years 16 years 15 years	25 years 20 years 18 years 16 years 15 years	25 years 20 years 18 years 16 years 15 years	25 years 20 years 18 years 16 years 15 years	25 years 20 years 18 years 16 years 15 years
tomato soup onion soup potato soup leek soup cabbage soup	tomato soup onion soup potato soup leek soup cabbage soup	tomato soup onion soup potato soup leek soup cabbage soup	tomato soup onion soup potato soup leek soup cabbage soup	tomato soup onion soup potato soup leek soup cabbage soup
lobster steak spaghetti chicken fish	lobster steak spaghetti chicken fish	lobster steak spaghetti chicken fish	lobster steak spaghetti chicken fish	lobster steak spaghetti chicken fish
cupcake cheesecake ice cream apple pie rice pudding	cupcake cheesecake ice cream apple pie rice pudding	cupcake cheesecake ice cream apple pie rice pudding	cupcake cheesecake ice cream apple pie rice pudding	cupcake cheesecake ice cream apple pie rice pudding