

-3, -2, -1, 0, 1, 2, 3

Summer Counts!

Looking for ways to keep your math skills HOT this summer? Here are some suggestions for students and families so that you will not lose any valuable skills that you have learned over the past year at RJH. (As an FYI for 8th graders, the first assignment in math will be a writing assignment for you to explain the many ways you use math over the summer. Here are suggestions for you to get a head start!)

Here are some suggestions for using practical math in real world contexts. Remember to always ask yourself, "is my answer reasonable?"

Road Trip!

Determine the gas mileage (miles per gallon) for each car in your family. How does the gas mileage for travel on highways compare to travel on rural roads? If you are taking a road trip, determine in advance how much money will be spent on gas using the average mileage.

Help plan a road trip, short or long, this summer. Use a traditional map and use the scale to determine approximate distances between points of interest. How does the traditional map compare to information given by a GPS or MapQuest?

Several games can be played with numbers from license plates you see. How can you use the digits to create the largest sum possible? If the numbers were values of a hand in cribbage, how many points would you score? How can you use the digits and all operations to get to 100? Are any of the digits primes? Is the number as a whole divisible by 3, 6, 7, or 9?

Dining Out

When dining out, help your family by estimating how much is appropriate to leave for a tip. Determine an average cost per person for the meal. Keep a journal and compare different restaurants you visit this summer. How would you rate each one, including cost as one of your factors in your rating?

Shopping

Shopping with a budget requires plenty of estimation skills. Including sales discounts make sure you have enough money for the items you need and want to buy. If you are helping to shop for groceries, which item is the best buy? Comparison shop for larger items you might purchase this summer. How do the prices in stores compare to prices you find online? What is the percent increase or decrease for these items?

Telling Time

Determine how long it will be until you meet your friend at the beach or until a special event. Convert the time into total hours, total minutes, and total seconds. Or perhaps even into part of a year or a decade. Are your numbers reasonable?

Redecorating

Are you planning on redecorating your room this summer? How much paint will it take to cover each of your walls and the trim? How much carpeting will you need and how much will it cost to purchase? If you are moving furniture, measure the dimensions before you start to make sure you have enough room to maximize your space.

Rainy Days

Have some games on hand such as cribbage, chess, Othello, Quarto, or MasterMind. These are great for reasoning and problem solving! If you have a deck of cards, Rummy is a good choice, as is arithmetic war. (To play arithmetic war, separate the entire deck into groups determined by the number of players. Decide which operation you will use: addition, subtraction, multiplication, or division. Each player flips two cards at a time and performs the operation using the values on their two cards. The person with the highest result takes all cards. This can be played using black suits as positive cards and red suits as negative cards, or with the smaller value as a base and the larger value as an exponent, or vice versa.)

Some websites to try

Basic Math Skills

<http://aaamath.com/>

<http://www.thatquiz.org/>

<http://www.slidermath.com/>

Online games and activities

<http://www.cut-the-knot.org/> (a personal favorite!)

<http://www.24hours7days.com/Javascript/> (several reasoning and problem solving games)

<http://illuminations.nctm.org/ActivityDetail.aspx?ID=73> (Concentration game using various math skills)

<http://www.subtangent.com/math/index.php> (for games, printable sheets)

<http://www.mathplayground.com/index.html>

<http://www.learner.org/interactives/geometry/index.html> (for 3D geometry)