Summer Math Activities for Students Entering 6th Grade - July

1. Find the sum & difference between $4\frac{3}{4}$ *and* $2\frac{3}{8}$.

2. As of today's date, what percentage of the games have the Yankees (or Red Sox) won so far this season?

What percentage have they lost?

3. Double all of the ingredients in the recipe:

Martha's Cookie Recipe
1 cup shortening
2 eggs
$\frac{1}{4}$ cup white sugar
$\frac{1}{4}$ cup brown sugar
$1\frac{1}{2}$ cups flour
1 teaspoon vanilla

4. Frank drank 2 quarts of Powerade and 2 pints of water at the soccer game. How many more ounces does he need to drink to make a gallon of liquids?

5. Give three examples of prime numbers greater than 50:

Give three examples of composite numbers greater than 75:

Hint: A prime number has only two factors, one and itself.

6. If you spend $27 per day, how long will it take you to spend $1,000.00

7. The perimeter of a square is 72 inches. What is the length of each side?

8. Dad bought 7 pounds of jellybeans. He paid $55.65 for them. What was the cost per pound?

9. Play a board game that uses mathematical thinking like Chess, Life, SET or Monopoly. Or you can practice your math facts!

10. What is the least common denominator

for $\frac{5}{6}$ and $\frac{3}{8}$?

for $\frac{3}{4}$ and $\frac{6}{7}$?

11. Find the sum & difference between 203.45 *and* 12.345.

12. Dad bikes 38 kilometers every day of the week. How many km does he bike in 4 weeks?

13. I used two-thirds of a 3 ½ pound bag of cherries for a pie. How many pounds of cherries did I use?

14. If the vet examined 14 dogs and 11 birds in one day, how many eyes did he look at? How many feet did he see?

15. If 310 children and 45 adults are going on a field trip, how many buses do they need? Each bus can seat 55 people. How many empty seats will there be?

16. Multiply:

23 x 100
66 x 1,000
734 x 0.01
2,389 x 0.001

What's your strategy?

17. I sold three-fourths of my cookies for 75 cents each. I had 48 cookies. How much money did I make?

18. Make a Venn Diagram for a rhombus and a parallelogram. What properties should go in the overlapping section?

19. Find the mean, median, mode, and range of the following set.
{94, 96, 78, 90}

20. How many minutes are in 1 hour? How many seconds in 1 hour? How many minutes in 1 day? How many seconds in 1 day?

21. A movie theater is showing the film "I LOVE MATH". The film is 2 1/5 hours long. If the theater has 5 showings each **day**, then what will be the total number of hours the film will be shown during a **week**?

22. Farmer Bob put a square fence around his garden to keep out the deer. One side was 10m in length. If the posts were placed 2m apart, how many posts did he use?

23. Recite the multiples of 9 up to
9 x 12. What's your strategy?

24. When I interviewed 100 5th graders, 81 said they liked peanut butter sandwiches, 75 liked jam sandwiches, and 70 liked both. How many students liked neither?
Hint: You can use a Venn Diagram

25. If you bought 3 CDs, each costing $12.99, and paid with a $50 bill, what would your change be? (Bonus: If you had to pay 6% sales tax also, what would your change be?)

26. Go to www.mathplayground.com and play a game. Don't have access to a computer? Then play chess or checkers instead!

27. If your friend's birthday is on the 203rd day of the year, what date is his or her birthday?

28. How many groups of 25 are there in 500? How many 20's are there in 6,000?

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Summer Math Activities for Students Entering 6th Grade - August

1. A piece of string was 30 cm long and it has been cut into 5 equal parts. If you connect 3 of the pieces, how long is the segment?	**2.** How many different combinations can you create with: 3 ice cream flavors, 2 types of sauce, and two kinds of sprinkles?	**3**. I have a machine that adds 16 to every number I put in. If 172 comes out, what number did I put in? If 111 comes out, what number did I put in?	**4.** Mr. Math asked his students to turn their books to the facing pages whose page numbers add up to 85. To which pages should the children turn?	**5**. Suzie made a list of all the numbers from 1 to 100. How many times did she write the number 2? What was your strategy?	**6.** Find a one-quart bottle and a one-litter bottle. Using real liquids, figure out which holds more. About how much more is it?	**7.** Roll two dice together and multiply the product. Record the product. Do this 25 times. Find the mean, median, range, and mode of the products. (If you have no dice, make up the numbers.)
8. Change the following improper fractions into mixed numbers: $\frac{13}{7}$ $\frac{11}{3}$ $\frac{21}{4}$ $\frac{101}{5}$	**9.** If you have 9 coins in your pocket, what is the most money you could have? The least?	**10.** Make a meter stick out of materials you find around your house, using a ruler as a benchmark. Remember, you'll need it to be 100 cm long!	**11.** About how many miles is it from your house to the ocean? If you were driving an average of 50 miles per hour, about how long would it take to get there?	**12.** Six nickels is what percent of one dollar? Bonus: What percent of $2.00 would it be?	**13.** A board that is 8 feet 4 in. long is cut into 5 pieces of equal length. How long is each piece? What if it was cut into 4 pieces instead, how long would it be?	14. Frank ran 16.5 miles last week. He ran 7 ½ miles on Monday and the rest on Friday. How many did he run on Friday?
15. A theater has 50 rows of 65 chairs and a balcony with 20 rows of 35 chairs. How many people can be seated at one time?	**16.** If a play at the theater referenced in Day 15 was sold out except for 3 rows in the balcony and one seat in all the other rows, how many people attended the play?	**17.** I bought one shirt for $27.25 and another for $18 less than the first one. I bought a third shirt for $22.50 more than the first. How much did I pay for all 3 shirts?	**18**. Find a recipe in your house and imagine that you were to double the recipe. Write a new ingredients list with the new amounts of each item.	**19.** Which takes longer - doing 100 jumping jacks or doing 30 push-ups? Time each one and figure out which takes longer.	**20.** Find the area of a closet in your bedroom (or another room in your house). Now find the area of the entire room and calculate what fraction of the room is the closet. Is it what you thought?	**21**. Go on a 3-D scavenger hunt. How many cylinders, pyramids, cubes, rectangular prisms, and cones can you find in 10 min.? Create a table with your data.
22. Play a math thinking game like: **Yahtzee Mastermind Monopoly Life Tenzi Battleship Dominoes Guess My Number**	**23.** A man has to be at work by 9:00 a.m. and it takes him 15 minutes to get dressed, 20 minutes to eat and 35 minutes to walk to work. What time should he get up?	**24.** Go to: http://www.dr-mikes-math-games-for-kids.com/ and on the left select 6th Grade math games. Be sure to check out the Addition Trick!	**25.** Using all four of the digits 5, 6, 7, and 9, any of the four operations, can you make the number 24? Can you make 36? Are there any numbers between 1 and 10 that you can't make?	**26.** Write 4 other names for the two fractions below: $\frac{4}{8}$ $\frac{1}{10}$	**27.** What three even numbers add up to 54? How many different answers can you find? Do you see patterns in your answer?	**28.** Estimate how many hours you spent thinking about or doing math this summer. What fraction of each day was it? What fraction of your total summer was it? Enjoy the last few days of summer!!

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