



Get ready for Seventh Grade!

In Grade 6, instructional time in math focused on four critical areas:

Critical Area One

Connecting ratio and rate to whole number multiplication and division, and using concepts of ratio and rate to solve problems

Critical Area Two

Completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers

Critical Area Three

Writing, interpreting, and using expressions and equations

Critical Area Four

Developing understanding of statistical thinking.

The following summer math activities will enable your child to review math concepts and reinforce skills learned this year. Just a few minutes each day spent "thinking and talking math" will help reinforce the math that has been learned and begin to bridge the foundation for extending to the concepts that will be developed next year. The goal is for your child to have fun thinking and working collaboratively to communicate mathematical ideas. While your child is working, discuss the math concept being reinforced.

Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat.
.	1 At Books Unlimited, 3 paperback books cost \$18. What would 7 books cost? How many books could be purchased with \$54.	2 In trail mix, the ratio of cups of peanuts to cups of chocolate candies is 3 to 2. How many cups of chocolate candies would be needed for 9 cups of peanuts?	3 A tank is 24 cm wide and 30 cm long. It contains a stone and is filled with water to a height of 8 cm. When the stone is pulled out of the tank, the height of the water drops to 6 cm. Find the volume of the stone.	4 If it took 7 hours to mow 4 lawns, then, at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	5 The temperature in Alaska was 23 degrees below zero and in Maine was 14 degrees below zero. Ben wrote Maine was colder because $-14 < -23$. Is Ben correct? Explain your answer.	6
7	8 Some kids like to ride their bikes to and from school. Let d be the distance in miles from a kid's home to school. Write 2 expressions to represent how far a kid travels by bike in 4 weeks.	9. Try a new activity at http://www.coolmath4kids.com/ Challenge yourself. What did you choose to do?	10 List all the factors of 48. List all the factors of 64. What are the common factors of 48 and 64? What is the greatest common factor of 48 and 64?	11 Write an expression to represent the situation. The skating rink charges \$100 to reserve and then \$5 per person. Write an expression to represent the cost for any number of people.	12 The temperature is -28°F in Anchorage, Alaska and 65°F in Miami, Florida. How many degrees warmer is it in Miami than in Anchorage?	13
14	15 Seth wants to buy a new skateboard that costs \$169. He has \$88. If he earns \$7.25 an hour pulling weeds, how many hours will he have to work to earn the rest of the money needed?	16 Lin rode a bike 20 miles in 150 minutes. If she rode at a constant speed, how far did she ride in 15 minutes? How long did it take her to ride 6 miles? How fast did she ride in miles per hour?	17 Mia walks her dog twice a day. Her evening walk is two and a half times as far as her morning walk. At the end of the week she says she walked her dog 30 miles. How long is her morning walk?	18. Alisa had $\frac{1}{2}$ liter of juice in a bottle. She drank $\frac{3}{8}$ liters of juice. What fraction of the juice in the bottle did Alisa drink?	19 Look up a math topic and read about the history. Who discovered it? How was it used? Ex. pi, gallons, metric.	20
21	22 What is the smallest number that is divisible by 1,2,3,4,5,6,7,8,9 and 10? How do you know?	23 Find two numbers that have 2, 3, and 5 as factors.	24 If the mean, median, and mode are all equal for the following set, what is the value of x ? $\{3,4,5,8,x\}$	25. The average of six numbers is 4. A seventh is added and the new average is 5. Find the seventh number.	26 Sophia's dad paid \$43.25 for 12.5 gallons of gas. What is the cost of one gallon of gas?	27
28	29. What is the prime factorization of 32?	30 Are $3(3x - y)$ and $12(x - 4y)$ equivalent expressions? Explain.				

Great Books to Read

Evil Genius by Catherine Jinks

Forever Changes by Brendan Halpin

Geek Abroad by Piper Banks

All of the Above by Shelley Pearsall

Hannah Divided by Adele Griffin

A Higher Geometry by Sharelle Byars Moranville

Guinness Book of Records by Time Inc

Mathematicians are People Too by Luetta Reimer & Wilbert Reimer