

Summer Math Calendar

For Students Entering Grade 6

The activities on this summer math calendar will review math concepts and skills of the grade that has just been completed during the 2017-2018 school year. Just a few minutes 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 you to have fun thinking and working to communicate mathematical ideas. While you are working think about how the solution was found and why you chose a particular strategy.

The calendar consists of 2 pages, a June calendar and a July calendar. Each calendar contains short math problems or guides you to play online math games. **You need to complete 2 activities each week, for a total of 20 different items during your summer break.** I would suggest getting a folder so you can neatly store and keep track of all calendar work. Please read each problem carefully so you understand what is being asked and are able to complete it correctly. **In order to receive full credit for a problem:**

1. Do all the work on plain, lined notebook paper.
2. Record the number of the calendar items on your paper with the work.
3. Show your mathematical thinking neatly.
4. Write your calculations neatly.
5. Have your parent check over your work and initial each box you complete.

Although not required, it is highly recommended that you go online or use an app weekly to practice your basic facts, particularly multiplication and division, so that they are not forgotten over the summer. Reminder: you are expected to know all basic facts through 12 accurately and fluently.

**This calendar is due the first day of school, August 8, 2018,
with all work stapled to it.**



June 2018 Entering 6th Grade Mathematics Calendar



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					<p>1. Order these fractions from least to greatest. $\frac{7}{8}, \frac{3}{5}, \frac{2}{3}, \frac{1}{2}$ Explain how you put them in order.</p>	<p>2. The perimeter of a square is 52 cm. What is the length of each side? What is the area of the square?</p>
<p>3. Jen is 12. Amy is 13. In 25 years, what will be the product of their ages?</p>	<p>4. I am a number less than 50. When divided by 5, my remainder is 4. Who am I? Is there more than one answer?</p>	<p>5. List all the factors of: 18 54</p>	<p>6. If you spend \$100.00 a day, how many days will it take to spend a million dollars? How many years is that?</p>	<p>7. What is a composite number? List three examples.</p>	<p>8. Six friends have 4 sandwiches to share. What <i>fraction</i> of a sandwich would each person get? Draw a picture to support your answer.</p>	<p>9. Evaluate: $5.7 + 6.09 =$ $9.03 - 1.5 =$ $5.5 - 3.01 =$</p>
<p>10. Draw a rectangle that is 4 cm by 8 cm. What is the perimeter of the rectangle? What is the area?</p>	<p>11. Solve in more than 1 way. $\begin{array}{r} 324 \\ \times 45 \\ \hline \end{array}$</p>	<p>12. Find four fractions between $\frac{8}{10}$ and $\frac{5}{4}$. Prove your answers on a number line.</p>	<p>13. Simplify: $\frac{6}{8} =$ $\frac{15}{25} =$ $\frac{8}{24} =$ Write 2 other fractions equivalent for each fraction.</p>	<p>14. You have a \$10 gift card to spend on iTunes. You buy an app for \$4.99 and a new pop single for \$2.99. How much should be left on your gift card?</p>	<p>15. How many more even number days are there in July than in February? Explain how you determined the answer.</p>	<p>16. Tyler and Madison buy a pizza that is cut into 8 equal slices. If Bill eats $\frac{3}{8}$, and Carol eats $\frac{1}{4}$ of the pizza, how many eighths of the pizza are left? Explain how you found your answer.</p>
<p>17. I bought a bag of 60 lollipops. I kept 3 lollipops and gave the rest to my 3 friends. They divided the lollipops equally among themselves. How many lollipops did each friend get?</p>	<p>18. Find the area of a square with a perimeter measuring 20 inches.</p>	<p>19. Draw a quadrilateral that has only one set of parallel sides. What is the best name for this figure?</p>	<p>20. If 4 mint chocolates cost \$1.00, how many mint chocolates can you get for \$5.50?</p>	<p>21. Add: $7\frac{3}{4} + 2\frac{1}{2} + 3\frac{3}{4}$</p>	<p>22. Devin bought a roll of ribbon to make bows for his gift boxes. There were 132 inches of ribbon on the roll. How many feet of ribbon was that?</p>	<p>23. Round to the place value in bold and underlined. $5\mathbf{2},788 =$ $8\mathbf{1}.07 =$ $2,91\mathbf{2},865 =$ $0.8\mathbf{3}1 =$</p>
<p>24. Visit the website www.mathplayground.com and play the Triplets to find equivalent fractions. How did you do?</p>	<p>25. Visit the website www.mathplayground.com and play the logic games. How did you do?</p>	<p>26. Solve in more than 1 way: 460 $\times 50$</p>	<p>27. Use 10 straight lines. How many triangles and squares can you make?</p>	<p>28. Have a scavenger hunt for real-world examples of parallel lines (ex. railroad tracks).</p>	<p>29. What are 4 fractions between $\frac{1}{4}$ and $\frac{1}{2}$. Prove your answers on a number line.</p>	<p>30. Make the <i>greatest</i> and <i>least</i> numbers you can using the digits 4, 1, 7, 8, and 2. Find their <i>sum</i> and <i>difference</i>.</p>



July 2018 Entering 6th Grade Mathematics Calendar



Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1. Monday through Friday a baker uses 1 1/4 sacks of flour when baking cakes. Will the baker use more than or less than 5 sacks of flour from Monday through Friday? How much more or less?	2. Find the sum of the digits of your phone number. What numbers between 2 and 10 is it divisible by	3. Play the Product Game At www.illuminations.nctm.org . Record the strategy that you used.	4. A rectangle is twice as long as it is wide. Its width is 5 1/2 cm. Find the area of the rectangle.	5. Would you rather have 5/12, 4/8 or 3/4 of a chocolate bar? Why?	6. Kayla is buying a DVD player on layaway for \$210. If she makes a down payment of \$30 and pays \$15 each week, how many weeks will it take Kayla to pay for the DVD player?	7. Name the first five multiples of 12. Name the factors of 24 and the factors of 150. What are the common factors?
8. What is the least common denominator for 3/4 and 1/2? 2/5 and 3/20? 5/6 and 1/4?	9. How many 25s are in 300? How many 20s are in 4,000?	10. Multiply 23 x 100 66 x 1000 139 x 10 652 x 100 48 x 1000 What's your strategy?	11. I am thinking of an odd number. The digits in my number are 4, 3, 2, 6. My hundreds place is less than my thousands place and less than my tens place. What number am I?	12. Square the following numbers: 8, 10, 6, 7, 9, 11	13. If the vet examined 13 dogs and 11 birds in one day, how many eyes did he look at? How many feet did the vet see?	14. What number am I? I am > 3,449 and I am < 3,502. I have a 1 in my ones place and a zero in my tens place. Create your own number riddle.
15. Play The Factor Game on the Web. Choose Game Type: 100 What's your score? How many factors can you find for 100?	16. Ian drank 2 quarts of water and 1 pint of Gatorade at the soccer game. How many more ounces does he need to drink to make a gallon?	17. If 210 children and 45 adults are going on a field trip, how many buses do they need? Each bus can seat 50 people. How many empty seats will you have?	18. 144 ÷ 12 128 ÷ 4 93 ÷ 3 72 ÷ 6 121 ÷ 11 What's your strategy?	19. I am an even, 3 digit palindrome. (ex: 464) The product of the digits is 8. What number am I?	20. Predict the number of times a 6 will occur when you roll a die 50 times. Roll the die and record the results- are they the same as your prediction? Why?	21. Choose a favorite professional athlete and research his/her annual salary. How much does s/he earn in a month? A day?
22. Go on a 3-D scavenger hunt. How many cylinders, pyramids, cubes, rectangular prisms and cones can you find today? Organize your data.	23. Plan a meal for your family. With an adult, make a list of the ingredients, go shopping, and then follow the recipe.	24. Today's number is 144 Make 144 by: -Multiplying two numbers	25. What 3 fractions might I add together and get an answer of 1/2? All denominators must be different.	26. Play Sudoku from the newspaper or online. How did logic help you to solve the puzzle? Attach the game to your paper.	27. If you spend \$100.00 a day, how many days will it take to spend a million dollars? How many years is that? What would you buy?	28. Find the quantity of each color of candies in a bag of skittles or M&M's. Figure out the percents. Graph the results.
29. If you buy 3 books at \$3.95 each, how much change would you get from \$20.00?	30.	31.				