



Grade 5 → 6 Summer Homework Math Package


It is important that you keep practicing your mathematical Knowledge over the summer to be ready for 6th grade. In this Package you will find a calendar of activities for the month of July and August.


What should you do?


- Take a new notebook for every-day practice. For each day you will need 2 pages;
- Start each day with vocabulary words: copy each word from the given day-list, find and write the meaning of each word in your notebook on the front page (pages 1,3,5, . . . and so on):
www.amathsdictionaryforkids.com/dictionary.html
- Use the internet to find the meaning of each word you do not know;
- Solve the problem of the day and write the solution with full explanation on the back page (pages 2,4,6,. . . and so on);
- Have the date of the entry. Have a clear and complete answer. Be neat and organize.



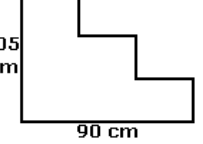
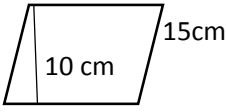
Do not forget to bring your notebook to school on September 5, 2017 - the first school day.

Have a Great Summer!!

<div style="background-color: black; color: white; padding: 5px; text-align: center;">July</div> <p style="text-align: center;">5 → 6</p> <p style="text-align: center;">Monday</p>	<p style="text-align: center;">Tuesday</p>	<p style="text-align: center;">Wednesday</p>	<p style="text-align: center;">Thursday</p>	<p style="text-align: center;">Friday</p>	<p style="text-align: center;">Saturday</p>	<p style="text-align: center;">Incoming 6th Grade</p>
<p>Scientific notation</p> <p style="text-align: right;">3</p>	<p>Divisibility Divisibility rules</p> <p style="text-align: right;">4</p>	<p>Prime and composite numbers</p> <p style="text-align: right;">5</p>	<p>Prime factorization GCF LCM</p> <p style="text-align: right;">6</p>	<p>Variable Expression Equation Properties of equality</p> <p style="text-align: right;">30</p>	<p>Decimal Negative power of ten</p> <p style="text-align: right;">1</p>	<p style="text-align: center;">Summer Home Work VOCABULARY</p>
<p>Mixed numbers Improper fraction</p> <p style="text-align: right;">10</p>	<p>Reciprocal Multiplicative inverse</p> <p style="text-align: right;">11</p>	<p>Ratio Equal ratios Rate Unit rate</p> <p style="text-align: right;">12</p>	<p>Proportion Cross product</p> <p style="text-align: right;">13</p>	<p>Equivalent fractions LCD Simplest form</p> <p style="text-align: right;">7</p>	<p>like denominators unlike denominators</p> <p style="text-align: right;">8</p>	
<p>Convert percent to fraction and decimal Convert fraction and decimal to percent</p> <p style="text-align: right;">17</p>	<p>Percent of a number</p> <p style="text-align: right;">18</p>	<p>Sales tax Total cost</p> <p style="text-align: right;">19</p>	<p>Discount Sale price</p> <p style="text-align: right;">20</p>	<p>Scale drawing Scale</p> <p style="text-align: right;">14</p>	<p>Increase Decrease</p> <p style="text-align: right;">21</p>	<p>Percent</p> <p style="text-align: right;">15</p>
<p>Commission Rate of commission</p> <p style="text-align: right;">24</p>	<p>Opposites Integers Absolute value</p> <p style="text-align: right;">25</p>	<p>Rational numbers</p> <p style="text-align: right;">26</p>	<p>Exponential form base exponent expanded form</p> <p style="text-align: right;">27</p>	<p>Order of operations Properties of operations</p> <p style="text-align: right;">28</p>	<p>Principal Interest Simple interest</p> <p style="text-align: right;">22</p>	

<div style="background-color: black; color: white; padding: 5px; text-align: center; font-weight: bold; font-size: 24px;">July</div> <p style="text-align: center; font-weight: bold;">5 → 6 Monday</p>	<p style="text-align: center; font-weight: bold;">Tuesday</p>	<p style="text-align: center; font-weight: bold;">Wednesday</p>	<p style="text-align: center; font-weight: bold;">Thursday</p>	<p style="text-align: center; font-weight: bold;">Friday 30</p>	<p style="text-align: center; font-weight: bold;">Saturday 1</p>	<p style="text-align: center; font-weight: bold;">Incoming 6th Grade</p>
<p>Write 0.00000678 in scientific notation.</p> <p style="text-align: right;">3</p>	<p>I am a 3-digit number less than 300. I am divisible by 2 and 5, but not 3. The sum of my digits is 7. What number am I? 4</p>	<p>The number 59 and I are the only two prime numbers between 50 and 60. Who am I? 5</p>	<p>I am the least common multiple of two numbers whose sum is 20. One number is 4 greater than the other. What number am I? 6</p>	<p>Use two prime numbers to create a fraction that is equivalent to $\frac{21}{49}$. 7</p>	<p>One-half of a number added to one-fourth of 96 is 30. What is the number? 8</p>	<p style="text-align: center; font-weight: bold;">Summer Home Work for FUN</p>
<p>$4\frac{5}{12} - 2\frac{9}{16}$</p> <p style="text-align: right;">10</p>	<p>$2 - \frac{3}{4}$ $6\frac{1}{4} + \frac{1}{2}$</p> <p style="text-align: right;">11</p>	<p>Which is the better buy: One gallon of milk for \$1.99, or $\frac{1}{2}$ gallon of milk for \$0.98? 12</p>	<p>Ruth's batting average was 400 after 60 bats. After 20 more bats she lifted her average to 500. How many hits she get in those 20 bats? 13</p>	<p>Tina wants to enlarge this old photograph of her parents for their anniversary. If the scale is 1 inch = 2,5 inches, what will the dimensions of the final photo be? 14</p>	<p>I am a three-place decimal that is equivalent to the difference between 1 and $\frac{3}{8}$. What decimal am I? 15</p>	
<p>Write $\frac{2}{5}\%$ as a fraction and decimal 17</p>	<p>What is 20% of $\frac{2}{5}$ of 15 18</p>	<p>A rug cost \$296 plus $6\frac{1}{2}\%$ sales tax. Find the sales tax and the total cost. 19</p>	<p>After a discount of 15%, the price of a shirt is \$51. What was the original price of the shirt? 20</p>	<p>After 2 month on a diet, John's weight dropped from 168 to 147 pounds. By what percent did John's weight drop? 21</p>	<p>Find the amount of interest and the total amount. \$250 for 2 years at simple interest rate of 7.5% per year. 22</p>	
<p>Amount sold for \$4,500. Rate of commissions 2.5% Commission? 24</p>	<p>Compare -6 and -6 25</p>	<p>Order from greatest to least $-2.4, \frac{5}{8}, -\frac{5}{8}, 0$ 26</p>	<p>Write 78,045 in expanded form using exponents 27</p>	<p>The sum of my digits is 11. When rounded to the nearest hundred, I am 500. Rounding to the nearest ten makes me 530. What number am I? 28</p>	<p>Evaluate the expression $2\{5[12 + 5(500 - 100) + 99]\}$ 29</p>	

<div style="background-color: black; color: white; padding: 5px; text-align: center; font-weight: bold; font-size: 1.5em;">August</div> <p style="text-align: center; font-weight: bold;">5 → 6</p> <p>Average</p> <p style="text-align: center; font-weight: bold;">Monday 31</p>	Permutations Combinations	Probability	Operations with integers	Equation	expression	Incoming 6th Grade
	Tuesday 1	Wednesday 2	Thursday 3	Friday 4	Saturday 5	
Exponent Base Power	Order of operation	Coordinate plane Ordered pair Quadrant Origin	Relation Function	t-table linear equation	Angle Acute angle Obtuse angle Right angle Straight angle	Summer Home Work VOCABULARY
7	8	9	10	11	12	
Complementary angles Supplementary angles	Reflex angle	Triangle Classify the triangles by sides and angles	Sum of all angles of a triangle	Perimeter Square Rectangle	Area Rectangle Perimeter	
14	15	16	17	18	19	
trapezoid parallelogram rhombus square rectangle	Similar triangles Corresponding sides	Perimeter Area	Parallelogram Area Perimeter	Surface area Area of a square	Circle Radius diameter Circumference	
21	22	23	24	25	26	
Area of a circle	Volume Rectangular prism Base Height	Mean Median Mode Range				
28	29	30				

<div style="background-color: black; color: white; padding: 5px; text-align: center;"> <h2 style="margin: 0;">August</h2> <p style="margin: 0;">5 → 6</p> <p style="margin: 0;">$3^2 + (-5)^2 - (-1)^3$</p> </div> <p style="text-align: center;">Monday 31</p>	<p>Marcy's average score on four tests was 84. Three of scores were 84, 88, and 80. What was the fourth score?</p> <p style="text-align: center;">Tuesday 1</p>	<p>Eight children line up at the water fountain. Find the number of possible arrangements.</p> <p style="text-align: center;">Wednesday 2</p>	<p>Find the probability of getting a sum of 5 or a sum of 7 when two cubes are tossed.</p> <p style="text-align: center;">Thursday 3</p>	<p>Solve $x + (-21) = -59$</p> <p style="text-align: center;">Friday 4</p>	<p>Evaluate $x - (-2)$ for $x = 3$</p> <p style="text-align: center;">Saturday 5</p>	<h2 style="margin: 0;">Incoming 6th Grade</h2>										
<p>Compare -7^2 and $(-7)^2$</p> <p style="text-align: right;">7</p>	<p style="text-align: center;">$\frac{-5^2 + (-5)^2}{ 4^2 - 2^5 - (-3)}$</p> <p style="text-align: right;">8</p>	<p>Draw a coordinate plane. Graph and label the points given. (0,5), (-3,1), (-1,0), (-4, -5)</p> <p style="text-align: right;">9</p>	<p>Tell whether relation is a function</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>a</td> <td>1</td> <td>6</td> <td>9</td> <td>1</td> </tr> <tr> <td>b</td> <td>3</td> <td>-1</td> <td>-1</td> <td>3</td> </tr> </table> <p style="text-align: right;">10</p>	a	1	6	9	1	b	3	-1	-1	3	<p>Make a T-table. Then graph each equation. $Y = -3$ $Y = -x - 3$ $X = -4$</p> <p style="text-align: right;">11</p>	<p>From midnight to noon, the hands of a clock form straight angles several times. How many times?</p> <p style="text-align: right;">12</p>	<h2 style="margin: 0;">Summer Home Work for FUN</h2>
a	1	6	9	1												
b	3	-1	-1	3												
<p>Find the complement and supplement of 56° angle.</p> <p style="text-align: right;">14</p>	<p>Draw a 255° angle.</p> <p style="text-align: right;">15</p>	<p>Is it possible to make an equilateral obtuse triangle? Explain.</p> <p style="text-align: right;">16</p>	<p>Find the third angle of a triangle, given that the first two angles are 55° and 70°. What kind of triangle is it?</p> <p style="text-align: right;">17</p>	<p>Find the area of the square which has the same perimeter as a rectangle 12 by 2.</p> <p style="text-align: right;">18</p>	<p>What is the greatest area of a rectangle with a perimeter of 50?</p> <p style="text-align: right;">19</p>											
<p>True or false. All trapezoids are parallelograms. Every square is a rhombus. Every rectangle is a square.</p> <p style="text-align: right;">21</p>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>$x =$ $y =$</p> </div> <div style="text-align: center;">  </div> </div> <p style="text-align: right;">22</p>	<div style="text-align: center;">  </div> <p>Find the perimeter and the area.</p> <p style="text-align: right;">23</p>	<div style="text-align: center;">  </div> <p>Area = ? Perimeter = ?</p> <p style="text-align: right;">24</p>	<p>Find the surface area of a cube with edge of 3.2 meters.</p> <p style="text-align: right;">25</p>	<p>If circumference of a Ferris wheel is 134 meters, what is its diameter? Use 3.14 for π.</p> <p style="text-align: right;">26</p>											
<p>What is the area of a circular garden with a diameter of 4 feet?</p> <p style="text-align: right;">28</p>	<p>An aquarium has a rectangular base 36 in by 12 in. its volume is 6912 in^3. Find its height.</p> <p style="text-align: right;">29</p>	<p>Find the mean, median, mode and range of a data set. 1.8, 1.95, 1.85, 1.8, 1.6</p> <p style="text-align: right;">30</p>				