













## July 2009 – Sixth Grade Summer Math Calendar

		<p><b>1</b> If you set out on a hike at 7:15 a.m. and return to your campsite at 3:05 p.m., how long have you been hiking? If you hiked at a rate of 3 miles per hour, how far did you hike?</p> 	<p><b>2</b> If the same tent is a rectangular prism and is 10 feet tall, what is its volume? What is its surface area? (<math>V = l \times w \times h</math>; SA = sum of the area of all faces)</p>	<p><b>3</b> Glacier National Park includes 1.4 million acres. Write 1.4 million in standard form. Write the number in words. Write the number in expanded form. [Ex. <math>122 = (1 \times 100) + (2 \times 10) + (2 \times 1)</math>]</p>
<p><b>6</b> Over 200,000 people fly into or out of O'Hare International airport in Chicago every day. About how many people is that per hour? About how many people fly in and out of O'Hare International airport in a week?</p> 	<p><b>7</b> The highest average temperature in Chicago, 84 degrees, occurs in the month of July. The lowest average temperature, 17 degrees, occurs in January. What is the difference in the average high and the average low?</p> 	<p><b>8</b> Chicago can get very cold in the winter and blizzards occur nearly every year. If a blizzard begins on Tuesday morning at 3:30 a.m. and ends on Wednesday evening at 4:45 p.m., how long did the blizzard last? Give your answer in days, hours, and minutes.</p>	<p><b>9</b> The average depth of the accumulated snow was 62 inches. About how many inches of snow fell per hour?</p> 	<p><b>10</b> If the snow melts at the same rate as it fell, how long will it take for all the snow to melt?</p> 
<p><b>13</b> The National Aquarium was designed using huge, interlocking geometric shapes. Use at least 4 geometric shapes to design and draw a unique building that could house marine life.</p> 	<p><b>14</b> The main entrance of the National Aquarium is shaped like an equilateral triangle. How many lines of symmetry does an equilateral triangle have? How many lines of symmetry does an isosceles triangle have?</p>	<p><b>15</b> The roof of the National Aquarium has reflective windowpanes to help regulate the temperature inside. Consider the letters F, I, S, and H. Copy each letter, and then draw the reflection of each letter.</p>	<p><b>16</b> Similar figures have the same shape but may be different sizes. Think about the letters of the alphabet (in manuscript). Which lower case letters are similar to their uppercase forms?</p>	<p><b>17</b> Starfish at the National Aquarium have 5 "arms." How many lines of symmetry do they have? Draw a picture of a five-point star and use dotted lines to show the star's lines of symmetry.</p> 
<p><b>20</b> Use a newspaper to keep track of the weather this week. Be sure to record rainfall amounts, as well as high and low temperatures. Make a chart and label it with the categories listed along with the days of the week.</p>	<p><b>21</b> It rained very hard for about 24 minutes yesterday and 1 inch of rain fell. At this rate, how many inches of rain would have fallen in one hour?</p> 	<p><b>22</b> What was the difference between the high and low temperatures on July 25<sup>th</sup>? On July 26<sup>th</sup>? Which of the two dates had the greatest range?</p> 	<p><b>23</b> Graph the high and low temperature data you've collected so far. Construct a double line graph to display your data.</p> 	<p><b>24</b> Complete your graph through July 28<sup>th</sup>. What is the difference between the highest daily temperature and the lowest daily temperature? Explain why a line graph is the best choice for this type of data.</p>
<p><b>27</b> If 1/4 of the animals at the Columbus Zoo eat an average of 200 pounds of food per day and the rest eat an average of 50 pounds of food per day, about how pounds of food do the animals eat in per day?</p>	<p><b>28</b> If a camping tent has an area of 210 square feet and its length is 21 feet, what is the width of the tent in inches? What is the area of the tent in square inches? (Hint: if 1 foot = 12 inches then 1 sq. foot = 12 inches squared or 144 sq. inches)</p>	<p><b>29</b> Glacier National Park is home to lakes filled with fish. If you caught a fish that weighs 126 ounces, how many pounds does it weigh? How many ounces would it weigh, if it weighs 4.75 pounds?</p> 	<p><b>30</b> Two factors multiplied together result in a product of 36,000. What might the numbers be? Find at least 6 pairs of factors.</p>	<p><b>31</b> Three consecutive even numbers add up to a number between 100 and 120. What might the numbers be?</p> 