

# SUMMER MATH CALENDAR

## LEAVING 7<sup>th</sup> GRADE

**Get ready to discover math all around you this summer!**

**Just as students benefit from reading throughout the summer, it is also beneficial for them to engage in math activities. Research shows that students better maintain and strengthen their math skills through regular and meaningful practices.**

**Attached is a math calendar with activities to explore this summer. In addition, our school subscribes to IXL and Khan Academy. In order for you to access these websites, you will need your child's username and password.**

**IXL Username** \_\_\_\_\_

**Khan Academy Username** \_\_\_\_\_

**Password** \_\_\_\_\_

**Password** \_\_\_\_\_

**Teacher's Email: [nguyenc@ces.k12.ct.us](mailto:nguyenc@ces.k12.ct.us)**

**This packet contains calendar pages for June, July, and August. I encourage you to do each of the activities. Color each box as it is done or write the answer in the box, if possible.**

*Please have your child complete these activities and play the math games. There is a blank calendar for your child to write their answers and show their work.*

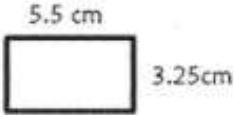
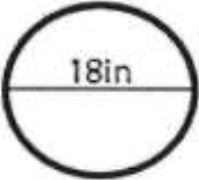
*Please return the signed calendars to your child's new teacher in September.*

**While working with your child, ask your child how he or she found a solution and why he or she chose a particular strategy.**

**I hope that you enjoy the activities, extend them, create new ones, and have fun!**

Ms. Catherine Nguyen-Ho, Math Specialist

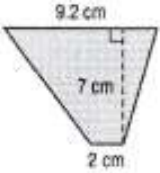
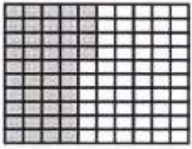

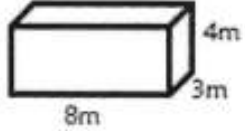
# JUNE

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>										
<p><b>Order the numbers from least to greatest.</b></p> <p><math>-\frac{3}{4}, 0.5, \frac{2}{3}, -\frac{7}{3}, 1.5</math></p>	<p><b>Give the sum or difference.</b></p> <p>a. <math>8 - 15</math>                      b. <math>-8 + 15</math>                      c. <math>-8 + -15</math></p>	<p><b>Simplify each expression by combining like terms.</b></p> <p>a. <math>11x - 7 - 3x + 4</math>                      b. <math>2a + (-8b) - 6a + b</math></p>	<p><b>Find the width of a rectangular prism if the volume is <math>546 \text{ cm}^3</math>, the height is 7 cm and the length is 13 cm.</b></p>	<p><b>It takes Billy fifteen minutes to complete <math>\frac{1}{8}</math> of a recipe. At this rate, how long will it take him to complete the recipe?</b></p>										
<p><b>A convenience store company would like to know what flavor slushy children ages 8-11 prefer. The company decides to ask students in grades 3-5 at Six to Six Magnet School. Identify which group is the population and which is the sample.</b></p>	<p><b>Complete the table that shows a proportional relationship between the amount of small boxes of popcorn and candy sold at a movie theater.</b></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="padding: 2px;">Candy (small boxes)</th> <th style="padding: 2px;">Popcorn (small boxes)</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">24</td> </tr> <tr> <td style="padding: 2px;">12</td> <td style="padding: 2px;">96</td> </tr> <tr> <td style="padding: 2px;">48</td> <td style="padding: 2px;"></td> </tr> <tr> <td style="padding: 2px;"></td> <td style="padding: 2px;">528</td> </tr> </tbody> </table>	Candy (small boxes)	Popcorn (small boxes)		24	12	96	48			528	<p><b>Trail mix made for three people uses 3 cups of almonds, 1 cup of raisins and <math>\frac{1}{3}</math> cup of chocolate chips. If the same ratio of ingredients is used for twelve people, how much of each ingredient is needed?</b></p>	<p><b>Solve each inequality.</b></p> <p>a. <math>x + 4 &lt; 16</math>                      b. <math>-2 &gt; x + 3</math>                      c. <math>\frac{1}{2}(x + 4) \leq 14</math></p>	<p><b>Find a new perimeter and area if the shape is enlarged by a scale factor of two.</b></p> <div style="text-align: center;">  </div>
Candy (small boxes)	Popcorn (small boxes)													
	24													
12	96													
48														
	528													
<p><b>When Sarah invests \$4,000 in a money market account she receives 1.4% simple interest annually. If she doesn't add or subtract any money, how much interest will she earn after 4 years?</b></p>	<p><b>Find the area and radius of the circle below:</b></p> <div style="text-align: center;">  </div>		<p><b>BONUS:</b></p> <p><b>Ashley earns \$9 an hour babysitting. She wants to buy a 16 GB iPhone that is \$120. Ashley has saved \$45 so far. How many more hours of babysitting does she need to do to earn the rest to purchase the iPhone?</b></p>											

# JULY

Monday	Tuesday	Wednesday	Thursday	Friday
		<p>Solve for the variable.</p> $\frac{3}{4}x = -24$	<p>Expand the expression using the distributive property.</p> $2(5x - 3)$	<p>Simplify the expression.</p> $-72 \div 8 + (-6) - 2$
<p>An item is marked down by 25%. What percentage of the original cost will you pay?</p>	<p>What is the property that best matches the following:</p> $13 + -13 = 0$	<p>Find the diameter of a circle if the area is 153.86 m<sup>2</sup>. Use 3.14 for pi.</p>	<p>Factor by using the GCF.</p> $36x + 81$	<p>Solve each inequality.</p> <p>a. <math>3x &lt; -24</math> b. <math>14 \leq -7x</math></p>
<p>A bag of jellybeans contains 6 red, 4 orange, 5 pink, 3 green, and 2 white jellybeans. What is the probability of choosing 1 pink jellybean at random?</p>	<p>Simplify each complex fraction.</p> <p>a.) <math>\frac{2\frac{1}{4}}{1\frac{1}{8}}</math>      b.) <math>\frac{7\frac{1}{3}}{4}</math></p>	<p>Translate into an equation and solve.</p> <p>Three more than the product of a number and 4 is 15. Find the number.</p>	<p>Max and two friends are going to a concert. The total cost is \$186. If there is a \$24 service fee, write and solve an equation to find out how much one ticket is.</p>	<p>A rectangular pyramid is sliced by a plane parallel to its base. What shape is shown from the cross section?</p>
<p>Divide. Write the answer in simplest form.</p> $-2\frac{1}{3} \div 1\frac{1}{12}$	<p>Find the unit rate. 150 pounds in 15 months</p>	<p>Solve &amp; check.</p> $-7y + 3 = -25$	<p>Write this ratio as a fraction in simplest form.</p> $12 \text{ feet} : 10 \text{ yards}$	<p>Choose the best unit price:</p> <p>\$12.95 for 3 lbs. of candy \$21.45 for 5 lbs. of candy</p>
<p>Solve for the variable.</p> $\frac{w}{-12} = 3$	<p>Nancy sold a house for \$225,900 and earned 4% commission. How much did Nancy earn for the sale of this house?</p>	<p>Write each number in standard form.</p> $7.86 \cdot 10^2$	<p>75% of my family loves pizza. How would you represent this as a decimal?</p>	<p>Four cookie recipes require different amounts of chocolate chips: 1/2 cup, 2/3 cup, 1/4 cup, and 1/3 cup. List these amounts in order from least to greatest.</p>

# AUGUST

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<p>What percent of 60 is 15?</p>	<p>Solve and check.</p> $\frac{n}{-4} + 5 = -1$	<p>Simplify the expression.</p> $-4 + (-32) \div (-4 \cdot 4)$	<p>Find the product.</p> $-7 \times 6$	<p>Six Flags New England has 25,562 riders on its Batman rollercoaster every day. Round this number to the nearest hundred.</p>
<p>The asking price on a house was \$350,000. Because it was on the market for six months it finally sold for \$297,500. What percentage of the original price was it sold for?</p>	<p>Write the ratio as a fraction in simplest form.</p> <p>75 seconds: 2 minutes</p>	<p>Find the area.</p> 	<p>What percent represents the amount of the grid that is shaded?</p> 	<p>Find the surface area and volume</p> 
<p>Round 2.347 to the nearest tenth.</p>	<p>Simplify.</p> $28 \div 7(5) =$	<p>Write the number in standard form.</p> $2.9 \cdot 10^6$	<p>Solve and check.</p> $6r + 1 = -17$	<p>Solve.</p> $5\frac{1}{3} + 2\frac{5}{6}$
<p>Find the surface area of the given prism:</p> 	<p>Solve and check.</p> $4 = 4 + 7y$	<p>Aubrey wants to buy a new coat that has a regular price of \$185. This weekend, the coat is on sale at a 33% discount. What is the sale price of the coat?</p>	<p>The cargo-carrying part of Billy's truck has a length of 8.3 meters, a width of 3 meters, and a height of 4.2 meters. What is the maximum volume of sand that Billy's truck can carry?</p>	<p>1/4 of our math class hates broccoli. How would you write this as a percentage?</p>
<p>Simplify.</p> $3 \cdot 4(5 - 3.8) + 2.7$	<p>Is <math>\frac{1}{6}</math> a terminating or repeating decimal. Explain.</p>		<p>Solve.</p> $8.79 - 4.07$	<p>Flip a water bottle 50 times. Record your results. What is the experimental probability of the bottle landing flat on a surface?</p>

# JUNE ANSWERS – SHOW YOUR WORK

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>

# JULY ANSWERS – SHOW YOUR WORK

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>

# AUGUST ANSWERS – SHOW YOUR WORK

<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>