

Summer Math Activities: Rising 8th Grade 8th Algebra 1 and Geometry

Prevent the summer math slump by practicing skills and using math every day! Complete at least 8 of the activities below, or challenge yourself do them all! When you finish an activity, write the date in the square.

M	A	T	H
<p>Practice Slope Intercept Form for 15 minutes on IXL.</p> <p>Please note skill numbers below.</p>	<p>Skittles or M&M Math: Create a bar graph to show how many of each color. THEN, write a fraction for each color (ex, 3/10 Blue means that 3 out of 10 total are blue).</p>	<p>Measure the Area and Perimeter of your bed and write measurements below.</p> <p>Area: _____</p> <p>Perimeter: _____</p>	<p>Increase a recipe by triple and make it. Attach the recipe and math</p> <p>What did you make?</p> <p>_____</p>
<p>Find Math in the news! Find and attach an article from a newspaper or magazine that relates to math in the real world.</p>	<p>Do a Sudoku puzzle. Attach completed puzzle to this sheet.</p>	<p>Practice Constant Rate of Change on IXL.</p> <p>Please note skill number below.</p>	<p>Practice Solving Equations Word Problems for 15 minutes on IXL.</p> <p>Please note skill number below.</p>
<p>Do a jigsaw puzzle with over 700 pieces. Attach a photo.</p>	<p>Baseball Math: Compare 5-10 players' stats. Calculate the mean, median, and mode for homeruns, runs batted in, and strikeouts</p>	<p>Practice Converting between percents, fractions, and decimals for 15 minutes on IXL.</p> <p>Please note skill numbers below.</p>	<p>Record the high temperature for a week. Create a line graph to show daily high temperatures and calculate the mean, median, and mode for the week.</p>
<p>Halve a recipe and make it. Attach the recipe and math. What did you make?</p> <p>_____</p>	<p>Practice Solving Proportions for 15 minutes on IXL.</p> <p>Please note skill numbers below.</p>	<p>Do 3 logic puzzles or brain teasers. (see http://brainden.com/logic-puzzles.htm or https://www.logic-puzzles.org/). Attach your completed puzzles.</p>	<p>Practice Adding and subtracting integers for 15 minutes on IXL.</p> <p>Please note skill numbers below.</p>

You may use IXL to practice these skills if you are entering **8th grade Alg. 1:**

- Factors
- Prime Factorization
- Greatest Common Factor
- Add or Subtract 3 or more Integers
- Multiply and Divide Integers
- Least Common Denominator
- Reciprocals and Multiplicative Inverses
- Evaluating Exponents
- Solve Proportions
- Coordinate Plane Review
- Area and Perimeter Word Problems
- Evaluate Multi-Step Variable Expressions
- Solve Two-Step Equations
- Find the Slope of a Graph
- Find Slope of a Line
- Write a Linear Equation from Point Slope
- Write a Linear Equation from Two Points
- Solve Equations: Word Problems
- Identify Functions
- Identify Independent and Dependent Variable
- Constant Rate of Change

You may use IXL to practice these skills if you are entering **8th grade Geometry:**

- Midpoints
- Distance between two points
- Solve advanced linear equations
- Slope intercept form: write an equation from a graph
- Slope intercept form: write an equation from a word problem
- Standard Form: graph an equation
- Slopes of parallel and perpendicular lines
- Write an equation for a parallel or perpendicular line
- Solve a system of equations using any method
- Factor quadratics with a leading coefficient of 1
- Factor quadratics with other leading coefficients
- Solve a quadratic equation using the zero product property
- Solve a quadratic equation by completing the square
- Solve a quadratic equation by using the quadratic formula
- Match quadratic functions and graphs