

Class of 2022 & 2023 Math Skills Enhancement Page

The following websites provide great videos and practice on topics that will be beneficial to you as you enter the high school. In the left hand column, you will see the topic. The middle column contains not only the website, but also a URL and the title of the video for ease of access. Lastly, the final column provides websites to practice the skills. While practice is not mandatory, it is important that you are prepared for high school content as you begin your transition next year. The following math skill websites will prepare you to be successful at the high school level.

Topic	Websites with Helpful Videos	Practice Websites
<p>Equations</p>	<ul style="list-style-type: none"> ● Embarc.online <ul style="list-style-type: none"> ○ https://embarc.online/course/view.php?id=70 <ul style="list-style-type: none"> ■ Grade 8 Module 4 All Lessons ● KhanAcademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-solving-equations <ul style="list-style-type: none"> ■ 8th Grade Unit: Solving Equations with One Unknown ■ Many relevant sections, practice what is needed ● Mathantics.com <ul style="list-style-type: none"> ○ https://mathantics.com/lesson/solving-basic-equations-1 <ul style="list-style-type: none"> ■ Solving Basic Equations Part 1 ○ https://mathantics.com/lesson/solving-basic-equations-2 <ul style="list-style-type: none"> ■ Solving Basic Equations Part 2 ○ https://mathantics.com/lesson/solving-2step-equations <ul style="list-style-type: none"> ■ Solving Two Step Equations ● MathMeeting.com <ul style="list-style-type: none"> ○ http://www.mathmeeting.com/algebra-videos/solving-equations/#sthash.Hz9vblkN.dpbs <ul style="list-style-type: none"> ■ Solving Equations Basics 	<ul style="list-style-type: none"> ● IXL.COM <ul style="list-style-type: none"> ○ https://www.ixl.com/math/grade-8 <ul style="list-style-type: none"> ■ Grade 8 Skills listed under W. One Variable Equations ■ Please note there is a 10 question daily limit for non registered users. ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/cc-eighth-grade-math/cc-8th-solving-equations <ul style="list-style-type: none"> ■ 8th Grade Unit: Solving Equations with One Unknown ■ Many relevant sections, practice what is needed ● Mathgames.com <ul style="list-style-type: none"> ○ https://www.mathgames.com/algebra <ul style="list-style-type: none"> ■ Games entitled, "Solve One Step Linear Equations," "Solve Two Step Linear Equations,"

		<p>“Solve Multistep Equations,” “Solve Equations Involving Like Terms”</p> <ul style="list-style-type: none"> ● Passy’s World of Mathematics <ul style="list-style-type: none"> ○ http://passyworldofmathematics.com/equations-games/ <ul style="list-style-type: none"> ■ List of games to practice equations
<p>Ratios, Rates and Percents</p>	<ul style="list-style-type: none"> ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates <ul style="list-style-type: none"> ■ Pre Algebra Unit: Ratios, Rates and Proportions. Complete any section with ratios, percents and rates ● Mathantics.com <ul style="list-style-type: none"> ○ https://mathantics.com/lesson/ratios-and-rates <ul style="list-style-type: none"> ■ Ratios and Rates ○ https://mathantics.com/lesson/what-are-percentages <ul style="list-style-type: none"> ■ What are Percentages? ○ https://mathantics.com/lesson/percent-and-equivalent-fractions <ul style="list-style-type: none"> ■ Percents and Equivalent Fractions ○ https://mathantics.com/lesson/finding-a-percent-of-a-number <ul style="list-style-type: none"> ■ Finding a Percent of a Number ○ https://mathantics.com/lesson/what-percent-is-it <ul style="list-style-type: none"> ■ What Percent Is It? ○ https://mathantics.com/lesson/percent-missing-total <ul style="list-style-type: none"> ■ Percents Missing Totals ● Neok12.com <ul style="list-style-type: none"> ○ https://www.neok12.com/Ratio-Rate-Percent.htm <ul style="list-style-type: none"> ■ Any topic under category ratio, rate and percent 	<ul style="list-style-type: none"> ● IXL.COM <ul style="list-style-type: none"> ○ https://www.ixl.com/math/grade-8 <ul style="list-style-type: none"> ■ 8th grade skills listed under H. Ratios, Rates and Proportions ■ Please note there is a 10 question daily limit for non registered users. ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/pre-algebra/pre-algebra-ratios-rates <ul style="list-style-type: none"> ■ Pre Algebra Unit: Ratios, Rates and Proportions. Complete any section with ratios, percents and rates. Many relevant sections. Practice what is needed. ● Mathgames.com <ul style="list-style-type: none"> ○ https://www.mathgames.com/grade8 <ul style="list-style-type: none"> ■ Games under category,

		<p style="text-align: center;">“Ratios”</p> <ul style="list-style-type: none"> ● Shmoop.com <ul style="list-style-type: none"> ○ https://www.shmoop.com/math-shack/problems/ <ul style="list-style-type: none"> ■ Practice under Ratios, Percentages and Proportions
<p>Evaluating Functions</p>	<ul style="list-style-type: none"> ● Khanacademy.com <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/pre-algebra/pre-algebra-equations-expressions/pre-algebra-substitution/v/variables-and-expressions-1 <ul style="list-style-type: none"> ■ Videos under section, “Substituting and Evaluating Expressions 	<ul style="list-style-type: none"> ● IXL.com <ul style="list-style-type: none"> ○ https://www.ixl.com/math/grade-8 <ul style="list-style-type: none"> ■ 8th grade skills listed under V. Expressions and Properties ■ Please note there is a 10 question daily limit for non registered users. ● Khanacademy.com <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/pre-algebra/pre-algebra-equations-expressions/pre-algebra-substitution/v/variables-and-expressions-1 <ul style="list-style-type: none"> ■ Practice and challenge problems under section, “Substituting and Evaluating Expressions
<p>Graphing Ordered Pairs on the Coordinate Plane</p>	<ul style="list-style-type: none"> ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/basic-geo/basic-geo-coord-plane <ul style="list-style-type: none"> ■ All videos relevant to graphing ordered pairs ● Mathantics.com <ul style="list-style-type: none"> ○ https://mathantics.com/ <ul style="list-style-type: none"> ■ All videos under category, “Algebra Basics Part 3” 	<ul style="list-style-type: none"> ● IXL.COM <ul style="list-style-type: none"> ○ https://www.ixl.com/math/grade-7 <ul style="list-style-type: none"> ■ 8th grade skills listed under N. Coordinate Plane ■ Please note there is a 10 question daily limit for non registered

		<p>users.</p> <ul style="list-style-type: none"> ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/basic-geo/basic-geo-coord-plane <ul style="list-style-type: none"> ■ All practice and challenge problems relevant to graphing ordered pairs ● Mathnook.com <ul style="list-style-type: none"> ○ https://www.mathnook.com/math/skill/coordinatedgridgames.php <ul style="list-style-type: none"> ■ Games listed on the page
<p>Graphing Lines</p>	<ul style="list-style-type: none"> ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/basic-geo/basic-geo-coord-plane <ul style="list-style-type: none"> ■ All videos relevant to graphing ordered pairs ● Mathantics.com <ul style="list-style-type: none"> ○ https://mathantics.com/lesson/basic-linear-functions <ul style="list-style-type: none"> ■ Basic Linear Functions ■ Slope and Distance ● Neok12.com <ul style="list-style-type: none"> ○ https://www.neok12.com/video/Algebra/zX65694f4344596265767d55.htm <ul style="list-style-type: none"> ■ Slope Intercept Form ■ Graphing Lines ○ 	<ul style="list-style-type: none"> ● IXL.com <ul style="list-style-type: none"> ○ https://www.ixl.com/math/algebra-1 <ul style="list-style-type: none"> ● Algebra skills listed under S. Linear Functions ● Please note there is a 10 question daily limit for non registered users. ● Khanacademy.com <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/pre-algebra/pre-algebra-equations-expressions/pre-algebra-substitution/v/variables-and-expressions-1 <ul style="list-style-type: none"> ■ Practice and challenge problems under section, "Graphing Lines and Slopes" ● Quizlet.com <ul style="list-style-type: none"> ○ https://quizlet.com/subject/graphing-lines/

		<ul style="list-style-type: none"> ■ Pick from multiple quizlets
<p>Writing equations of lines</p>	<ul style="list-style-type: none"> ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:forms-of-linear-equations <ul style="list-style-type: none"> ■ Videos in unit, "Forms of Linear Equations" ● Neok12.com <ul style="list-style-type: none"> ○ https://www.neok12.com/video/Algebra/zX554e417e41047e000c7102.htm <ul style="list-style-type: none"> ■ Equation of a line 	<ul style="list-style-type: none"> ● IXL.com <ul style="list-style-type: none"> ○ https://www.ixl.com/math/algebra-1 <ul style="list-style-type: none"> ● Algebra skills listed under S. Linear Functions ● Please note there is a 10 question daily limit for non registered users. ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:forms-of-linear-equations <ul style="list-style-type: none"> ■ Practice Questions in unit, "Forms of Linear Equations" ● Tutorial.math.lamar.edu <ul style="list-style-type: none"> ○ https://tutorial.math.lamar.edu/problems/alg/Lines.aspx <ul style="list-style-type: none"> ■ Practice Problems with Solutions ● Quizlet.com <ul style="list-style-type: none"> ○ https://quizlet.com/165203677/practice-writing-equations-of-lines-flash-cards/
<p>Factoring</p>	<ul style="list-style-type: none"> ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:quadratics-multiplying-factoring <ul style="list-style-type: none"> ■ Videos in section, "Quadratics Unit: Multiplying & Factoring" ● Mathhelp.com <ul style="list-style-type: none"> ○ Click Algebra > Click factoring 	<ul style="list-style-type: none"> ● IXL.com <ul style="list-style-type: none"> ○ https://www.ixl.com/math/algebra-1 <ul style="list-style-type: none"> ● Algebra skills listed under AA. Factoring ● Please note there is a 10 question daily

	<p>and use the links to determine your areas of need</p> <ul style="list-style-type: none"> ○ 	<p>limit for non registered Users.</p> <ul style="list-style-type: none"> ● Khanacademy.org <ul style="list-style-type: none"> ○ https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:quadratics-multiplying-factoring <ul style="list-style-type: none"> ■ Questions in section, “Quadratics Unit: Multiplying & Factoring” ● Tutorial.math.lamar.edu <ul style="list-style-type: none"> ○ https://tutorial.math.lamar.edu/problems/alg/factoring.aspx ○ Practice problems with solutions
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The following websites listed on the Ansonia Public Schools Distance Learning page are also helpful. They are copied below:

- [Khan Academy](#): Students practice at their own pace, first filling in gaps in their understanding and then accelerating their learning.
- [National Library of Virtual Manipulatives](#): A library of uniquely interactive, web-based virtual manipulatives or concept tutorials, mostly in the form of Java applets, for mathematics instruction (K-12 emphasis).
- [Math Help](#): (Alg 1 students ONLY) Site that offers the one-on-one learning experience that every student needs to conquer math.
- [CK-12 Math/Science](#): We offer free high-quality, standards-aligned, open content in the STEM subjects.
- [Flipped Math](#): Allows students to demonstrate mastery of all concepts and progress at their individual pace. Good for Algebra 1 classes.
- [NEOK12](#): A collection of educational videos, games, quizzes, diagrams, and puzzles that kids love.
- [Math Drills](#): free math worksheets including number sense, arithmetic, pre-algebra, geometry, measurement, money concepts and much more.
- Students can also visit [Greg Tang Math](#) for games and other math learning opportunities.
- [Desmos Online Calculator](#): A free on-line graphing calculator.
- [Funbrain](#): Offers hundreds of games, books, comics, and videos that develop skills in math, reading, problem-solving and literacy.
- [Engineering Activities for Kids](#): STEM activities using regularly found items in the household.

