



# High School




## Mathematics At-Home Resources



Online or screen time resources




Offline/no screen time resources

MATH RESOURCES (SCREEN TIME OR WITH TECHNOLOGY) 		
Name of Site and Link	Description/Directions/Explanation	Course
	<p><b>Watch a movie</b> – These movies are about math, mathematicians or include how math is used in our everyday lives. Many are based on true stories. As you watch the movie think about where you see math applied in the context of the movie and/or what impact does mathematical understanding have on the characters in the movie.</p> <ul style="list-style-type: none"> <li>• October Sky (PG)</li> <li>• Back to the Future (PG)</li> <li>• Hidden Figures (PG)</li> <li>• Queen of Katwe (PG)</li> <li>• Stand and Deliver (PG)</li> <li>• Apollo 13 (PG)</li> <li>• Moneyball (PG-13)</li> <li>• A Beautiful Mind (PG-13)</li> <li>• The Man Who Knew Infinity (PG-13)</li> <li>• The Martian (PG-13)</li> <li>• Proof (PG-13)</li> <li>• The Imitation Game (PG-13)</li> <li>• Donald in Mathmagic Land (free on youtube)</li> </ul>	All HS Math courses

<p><b>Youcubed.org Online Student Course</b></p> <p><a href="https://www.youcubed.org/online-student-course/">https://www.youcubed.org/online-student-course/</a></p>	<p>How to Learn Math is a free class for learners of all levels of mathematics. There are 6 sessions, the first three are approximately 10 minutes long and the last three approximately 20 minutes long.</p> <p>Main concepts to learn in this course:</p> <ul style="list-style-type: none"> <li>• Knocking Down the Myths About Math</li> <li>• Math and Mindset</li> <li>• Mistakes and Speed</li> <li>• Number Flexibility, Mathematical Reasoning, and Connections</li> <li>• Number Patterns and Representations</li> <li>• Math in Life, Nature and Work</li> </ul>	<p>All HS Math courses</p>
<p><b>NRich Interactive Math Games</b></p> <p><a href="https://nrich.maths.org/9465">https://nrich.maths.org/9465</a></p>	<p>Interactive math games. Includes topics such as angles, factors, ratios, linear graphs, integers, and vectors. Also includes problems solving, number sense and strategy games.</p>	<p>All HS Math courses</p>
<p><b>KenKen Math Puzzles</b></p> <p><a href="http://www.kenkenpuzzle.com/">http://www.kenkenpuzzle.com/</a></p>	<p>Online KenKen Math number puzzles. You can choose the size of the puzzle and the operations used.</p>	<p>All HS Math courses</p>
<p><b>Solve Me Puzzles</b></p> <p><a href="https://solve.me/edc.org/">https://solve.me/edc.org/</a></p>	<p>Includes equation mobiles, number sense riddles and number puzzles.</p>	<p>All HS Math courses</p>
<p><b>Math Pickle</b></p> <p><a href="https://mathpickle.com/organized-by-grade/">https://mathpickle.com/organized-by-grade/</a></p>	<p>MathPickle.com is a free online resource of original mathematical puzzles, games and unsolved problems for K-12.</p>	<p>All HS Math courses</p>
<p><b>Math PhET Simulations</b></p> <p><a href="https://phet.colorado.edu/en/simulations/category/math">https://phet.colorado.edu/en/simulations/category/math</a></p>	<p>PhET simulations provide fun, interactive research-based simulations for use in K-12 and college STEM education.</p>	<p>All HS Math courses</p>

<p><b>Cool Math</b> <a href="https://www.coolmathgames.com/">https://www.coolmathgames.com/</a></p>	<p>Interactive math games. Includes logic, number sense, and strategy games.</p>	<p>All HS Math courses</p>
<p><b>IXL Texas Math</b> <a href="https://www.ixl.com/standards/texas/math">https://www.ixl.com/standards/texas/math</a></p>	<p>Math practice that feels like play in the form of games and other fun activities.</p>	<p>Algebra 1, Algebra 2, Geometry, Pre-Calculus</p>
<p><b>Algebra Pro - Complete Workbook with ShowMe Lessons (for ipad only)</b> <a href="https://tinyurl.com/qvg6ds6">https://tinyurl.com/qvg6ds6</a></p>	<p>This app includes over 100 practice questions with instant "ShowMe" lessons: if you get stuck on a problem, just tap "ShowMe" and see a step-by-step animation of how to solve the problem, instantly.</p>	<p>Algebra 1</p>
	<p><b>Watch a movie</b> – These movies are about math, mathematicians or include how math is used in our everyday lives. Many are based on true stories. As you watch the movie think about where you see math applied in the context of the movie and/or what impact does mathematical understanding have on the characters in the movie.</p> <ul style="list-style-type: none"> <li>• October Sky (PG)</li> <li>• Back to the Future (PG)</li> <li>• Hidden Figures (PG)</li> <li>• Queen of Katwe (PG)</li> <li>• Stand and Deliver (PG)</li> <li>• Apollo 13 (PG)</li> <li>• Moneyball (PG-13)</li> <li>• A Beautiful Mind (PG-13)</li> <li>• The Man Who Knew Infinity (PG-13)</li> <li>• The Martian (PG-13)</li> <li>• Proof (PG-13)</li> <li>• The Imitation Game (PG-13)</li> <li>• Donald in Mathmagic Land (free on youtube)</li> </ul>	<p>All HS Math courses</p>

MATH RESOURCES (NO SCREEN TIME OR NO TECHNOLOGY)	
<p><b>Plan a home improvement project</b> - determine what materials, the amount of materials you would need, and how much the project would cost. For example:</p> <ul style="list-style-type: none"> <li>• Painting a room</li> <li>• Building a desk, bookcase, etc.</li> <li>• Putting in new flooring</li> <li>• Building a garden</li> </ul>	 All HS Math Courses
<p><b>Play a card game</b> – Solitaire, Rummy, Hearts, Speed, etc.</p> <p>Directions for over 40 games can be found on the following link:  <a href="https://playingcarddecks.com/blogs/all-in/40-great-card-games-for-all-occasions">https://playingcarddecks.com/blogs/all-in/40-great-card-games-for-all-occasions</a></p>	All HS Math Courses
<p><b>Play a number puzzle</b> – KenKen, Soduko, Kakuro, Numbrix</p> <ul style="list-style-type: none"> <li>• Printable puzzles can be found on the following sites:               <ul style="list-style-type: none"> <li>• <a href="https://www.puzzlesandbrains.com/index.php">https://www.puzzlesandbrains.com/index.php</a></li> <li>• <a href="https://parade.com/numbrix/">https://parade.com/numbrix/</a></li> </ul> </li> </ul>	All HS Math Courses
<p><b>Plan a business</b></p> <ul style="list-style-type: none"> <li>• For example: A grass mowing business where you are going to mow the neighbors’ yards. How much will you charge? Will your cost be based on the size of the yard? Create a plan.</li> </ul>	All HS Math Courses

<p><b>Play a board game</b> – Chess, Checkers, Blockus, Set, Yahtzee, Othello, Mastermind, Racko, Prime Club, Farkle, etc.</p>	<p>All HS Math Courses</p>
<p><b>Plan a meal</b> – you could just plan the meal or plan and cook the meal</p> <ul style="list-style-type: none"> <li>• Find a recipe, and double or half the recipe</li> </ul>	<p>All HS Math Courses</p>