

### Sixth, Seventh, and Eighth Grade Summer Math

- Go to <https://www.ixl.com>
- Enter your Username and Password on the top right of the website, and click “Sign in”



- To find the list of skills, click the “IXL” logo in the top left of the screen.
- Find your grade (the one you just completed), and click the blue link to the right of Math in your grade box.

5 Fifth grade	6 Sixth grade	7 Seventh grade	8 Eighth grade
Multiplying fractions and decimals, idioms, prepositions, photosynthesis, molecules, economics, and more.	Ratios and percentages, variable expressions, Greek and Latin roots, genetics, ancient history, and more.	Proportional relationships, phrases and clauses, connotations, climate change, world history, and more.	Linear functions, the Pythagorean theorem, active and passive voice, chemical formulas, civics, and more.
Math <a href="#">335 skills &gt;&gt;</a> Language arts <a href="#">170 skills &gt;&gt;</a> Science <a href="#">96 skills &gt;&gt;</a> Social studies <a href="#">109 skills &gt;&gt;</a>	Math <a href="#">320 skills &gt;&gt;</a> Language arts <a href="#">166 skills &gt;&gt;</a> Science <a href="#">117 skills &gt;&gt;</a> Social studies <a href="#">134 skills &gt;&gt;</a>	Math <a href="#">289 skills &gt;&gt;</a> Language arts <a href="#">155 skills &gt;&gt;</a> Science <a href="#">111 skills &gt;&gt;</a> Social studies <a href="#">177 skills &gt;&gt;</a>	Math <a href="#">317 skills &gt;&gt;</a> Language arts <a href="#">161 skills &gt;&gt;</a> Science <a href="#">110 skills &gt;&gt;</a> Social studies <a href="#">128 skills &gt;&gt;</a>

- This link will take you to the index page of all the skills for your grade level.
- Now find the skills you are required to work on over the summer (listed on handout). They are in alpha-numeric order.
  - Below are instructions for Honors Students:
    - Honors 5<sup>th</sup> grade completes the Sixth to Seventh Grade Handout
    - Honors 6<sup>th</sup> grade completes the Seventh to Eighth Grade Handout
    - Honors 7<sup>th</sup> Grade Completes the Eighth Grade Handout

- Click the skill text, and start completing the problems.

### Sixth grade math

Here is a list of all of the math skills students learn in sixth grade! These skills are organized into categories, and you can move your mouse over any skill name to preview the skill. To start practicing, just click on any link. IXL will track your score, and the questions will automatically increase in difficulty as you improve!

<p><b>Whole numbers</b></p> <ul style="list-style-type: none"> <li>    A.1 Place values in whole numbers</li> <li>    A.2 Choose word names for numbers</li> <li>    A.3 Write word names for numbers</li> <li>    A.4 Roman numerals</li> <li>    A.5 Add and subtract whole numbers</li> <li>    A.6 Add and subtract whole numbers: word problems</li> </ul> <p><b>Multiplication</b></p> <ul style="list-style-type: none"> <li>    B.1 Multiply whole numbers</li> <li>    B.2 Multiply whole numbers: word problems</li> <li>    B.3 Multiply whole numbers with four or more digits</li> <li>    B.4 Multiply numbers ending in zeroes</li> <li>    B.5 Multiply numbers ending in zeroes: word problems</li> <li>    B.6 Multiply three or more numbers (75)</li> <li>    B.7 Multiply three or more numbers: word problems</li> </ul>	<p><b>Operations with integers</b></p> <ul style="list-style-type: none"> <li>    N.1 Add integers using counters</li> <li>    N.2 Add integers</li> <li>    N.3 Subtract integers using counters</li> <li>    N.4 Subtract integers</li> <li>    N.5 Add and subtract integers: find the sign</li> <li>    N.6 Add and subtract integers: input/output tables</li> <li>    N.7 Add three or more integers</li> <li>    N.8 Multiply integers: find the sign</li> <li>    N.9 Multiply integers</li> <li>    N.10 Divide integers: find the sign</li> <li>    N.11 Divide integers</li> </ul> <p><b>Mixed operations</b></p> <ul style="list-style-type: none"> <li>    O.1 Add, subtract, multiply, or divide whole numbers</li> <li>    O.2 Add, subtract, multiply, or divide two whole numbers: word problems</li> <li>    O.3 Evaluate numerical expressions involving whole numbers</li> <li>    O.4 Add, subtract, multiply, or divide</li> </ul>	<p><b>One-variable equations</b></p> <ul style="list-style-type: none"> <li>    Z.1 Does x satisfy an equation?</li> <li>    Z.2 Which x satisfies an equation?</li> <li>    Z.3 Write an equation from words</li> <li>    Z.4 Model and solve equations using algebra tiles</li> <li>    Z.5 Write and solve equations that represent diagrams</li> <li>    Z.6 Solve one-step equations with whole numbers</li> <li>    Z.7 Solve one-step equations with decimals, fractions, and mixed numbers</li> <li>    Z.8 Solve one-step equations: word problems</li> <li>    Z.9 Solve two-step equations</li> <li>    Z.10 Solve equations involving like terms</li> <li>    Z.11 Solve equations involving integers</li> </ul> <p><b>One-variable inequalities</b></p> <ul style="list-style-type: none"> <li>    AA.1 Solutions to inequalities</li> <li>    AA.2 Graph inequalities on number lines</li> </ul>
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- You have adequately completed a skill when you:
  - A. Get a SmartScore of at least 70
  - Or
  - B. Spend 10 minutes on a skill and get a SmartScore of at least 50
  - Or
  - C. Spend 15 Active Minutes on the skill (don't work too long on a skill if it is too hard).
    - IXL checks Active Time working and logs it for the teacher, so if you just click a problem, and leave it open for 15 minutes, it will not log any time. You need to actively click and try to solve the problems for the Active Time to pass.
- If a skill is proving too difficult, type in the skill name (not including the letter and number) into Google. There are many educational websites and YouTube videos that give instruction on how to solve these problems. Be sure to ask your parents permission before going to any other sites at home.
  - For Example, Sixth grade skill E.8 Least common multiple. Type in "Least common multiple" in Google, and the first video is from Khan Academy, and the second is from Mathisfun.com. Both are useful in learning this skill.
- Once you have completed all the skills, you are done! Your teacher will check these when you return and it will be worth a test grade in the first quarter.
- If you have any questions, feel free to email or call the school. The username and passwords are automatically assigned by IXL, and available on our school website.