



MAHWAH HIGH SCHOOL

50 Ridge Road, Mahwah, NJ 07430

June 2023

Honors Calculus

Dear Students and Parents:

This summer, we want you to relax and have fun with your family and friends! We want you to use this time during the summer to recharge!

The web-based program, IXL, will be available to you over the summer to allow you the opportunity to strengthen and deepen content knowledge while maintaining fluency in pre-requisite skills. This purposeful practice will be helpful to you in September, and it is highly suggested that you participate in the practice over the summer.

Below are directions for a “summer math workout” available through IXL after July 1.

- ✓ To access IXL, go to <https://www.ixl.com/signin/mtps> To sign in, click the “Sign in with Google” button.
- ✓ Click on the Math tab on the top green ribbon.
- ✓ Click on the tabs indicated in the table on side 2 of this sheet to access the skills to practice.
- ✓ ***Very important: Remember to login before starting your work to keep track of your progress.*
- ✓ Students should aim to achieve a Smartscore between 60 and 80 points on each skill. The Smartscore can be found on the right hand side of the screen in the skill practice window. By all means, aim for mastery of the skill (a Smartscore of 100).
- ✓ It would be helpful for you to keep a log of your work that you will bring in to class early in September.
- ✓ Listed on side 2 of this page are the essential math skills that you should practice during the summer. If you would like to practice different skills, feel free to practice them but remember to focus on the essential skills listed below. To access the skills, click on the title of skill that matches the titles listed below. (Skills are listed by their title not skill number, as sometimes the skills numbers change during the summer as IXL updates their product.)

Please keep the following in mind:

- If you hit a snag and start getting problems incorrect, make sure you check the steps of the solution before giving up entirely. You can also find help online <https://www.khanacademy.org/math>.
- You do not have to reach between 60 and 80 Smartscore points in one session because the program keeps a record of your score so that you can come back to any skill at any time. Keep trying though!
- Check to be sure that you are typing your answer correctly. If you get a problem wrong, check to see if you have typed the answer the way IXL prefers.
 - Examples of some answers that will be marked wrong if incorrectly typed:
 - When typing an answer to a division problem, be sure to not add a 0 in front of the answer; for example, 056.8 instead of 56.8.
 - When typing a mixed number be sure to type the whole number THEN space THEN the fraction: example $1 \frac{1}{2}$. There should be a space between the 1 and the $\frac{1}{2}$.
- Because the site saves all student results, progress can be monitored at any time by clicking on the *Reports* tab at the top of the page.



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IXL Review Topics

These skills are prerequisites for the first unit that will be covered in September. Work on Skill Set #1 first, then if you have conquered that skill set, move on to Skill Set #2, then Skill Set #3.

Skill set #1 found in the Algebra 2 tab
<ul style="list-style-type: none">• Factor Quadratics• Factor by Grouping• Factor Sums and Differences of Cubes• Factor Polynomials• Simplify Rational Expressions
Skill set #2 found in the Pre Calculus tab
<ul style="list-style-type: none">• Solve a Quadratic Equation by Factoring• Solve a Quadratic Equation using the Quadratic Formula• Rational functions: asymptotes and excluded values• Solve Trigonometric Equations
Skill set #3 found in the Calculus tab
<ul style="list-style-type: none">• Composition of Functions• Find Trigonometric Ratios Using Reference Angles

If you have any questions, please feel free to email Danielle Poleway, Mathematics Supervisor, at dpoleway@mahwah.k12.nj.us

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