



Summer Math 2016
Upper School Mathematics
Honors Precalculus
Mr. Viglucci

Dear Honors Precalculus Students and Parents,

This year, students enrolled in Honors Precalculus will complete summer math work online. The learning activities listed on the following pages are to be accessed through the IXL.com website. **Be sure to log in with your username and password to track your progress and receive credit for your work.** This information has been emailed to your Wooster School email account.

Approach the learning activities in the order of your choosing. Work on each module for 25-30 minutes or until you reach 90% mastery. If, for example, you reach 90% mastery after 12 minutes, you should feel free to move onto a new topic.

It will take you about **11 hours** to complete this work. We encourage you to break this work into manageable parts. Try to tackle three activities per week. To keep track of your progress, check off each activity upon completion.

Mr. Viglucci has the ability to view your activity log and he can see how many problems you attempt and how long you work. This is how Wooster School will track your progress over the course of the summer and develop a better understanding your mathematical background.

When you approach this work, bear in mind the Wooster School Honor Code. In this instance, the expectation is that you will complete this work independently.

If you run into any questions or confusion, please email the Honors Precalculus teacher at: nick.viglucci@woosterschool.org.

Good luck!

Honors Precalculus Summer Math Work Checklist

- ⌘ D-1 Domain and Range
<https://www.ixl.com/math/algebra-2/domain-and-range>

- ⌘ D.4 Finding Values using Functions
<https://www.ixl.com/math/algebra-2/find-values-using-function-graphs>

- ⌘ E-12 Solving a System with Three Variables
<https://www.ixl.com/math/algebra-2/solve-a-system-of-equations-in-three-variables-using-substitution>

- ⌘ H-6 Add, Subtract,, Multiply, Divide Complex Numbers
<https://www.ixl.com/math/algebra-2/add-subtract-multiply-and-divide-complex-numbers>

- ⌘ H.8 Powers of i
<https://www.ixl.com/math/algebra-2/powers-of-i>

- ⌘ I-5 Factor by Grouping
<https://www.ixl.com/math/algebra-2/factor-by-grouping>

- ⌘ I.6 Factor Sums and Differences of Cubes
<https://www.ixl.com/math/algebra-2/factor-sums-and-differences-of-cubes>

- ⌘ I.7 Factor Polynomials
<https://www.ixl.com/math/algebra-2/factor-polynomials>

- ⌘ J-10 Completing the Square
<https://www.ixl.com/math/algebra-2/solve-a-quadratic-equation-by-completing-the-square>

- ⌘ J.11 Quadratic Formula
<https://www.ixl.com/math/algebra-2/solve-a-quadratic-equation-using-the-quadratic-formula>

- ⌘ J.12 Discriminant
<https://www.ixl.com/math/algebra-2/using-the-discriminant>
- ⌘ K.4 Long Division
<https://www.ixl.com/math/algebra-2/divide-polynomials-using-long-division>
- ⌘ K.5 Synthetic Division
<https://www.ixl.com/math/algebra-2/divide-polynomials-using-synthetic-division>
- ⌘ K.8 Write a Polynomial from the Roots
<https://www.ixl.com/math/algebra-2/write-a-polynomial-from-its-roots>
- ⌘ L.7 Multiply Radical Expressions
<https://www.ixl.com/math/algebra-2/multiply-radical-expressions>
- ⌘ L.8 Divide Radical Expressions
<https://www.ixl.com/math/algebra-2/divide-radical-expressions>
- ⌘ L.11 Radicals and Conjugates
<https://www.ixl.com/math/algebra-2/simplify-radical-expressions-using-conjugates>
- ⌘ M.6 Simplifying Expressions with Rational Exponents ii
<https://www.ixl.com/math/algebra-2/simplify-expressions-involving-rational-exponents-ii>
- ⌘ N.6 Add and Subtract Rational Expressions
<https://www.ixl.com/math/algebra-2/add-and-subtract-rational-expressions>
- ⌘ O.5 Function Composition
<https://www.ixl.com/math/algebra-2/composition-of-linear-and-quadratic-functions>
- ⌘ O.6 Identify Inverse Functions
<https://www.ixl.com/math/algebra-2/identify-inverse-functions>

⌘ P.6 Function Transformations
<https://www.ixl.com/math/algebra-2/describe-function-transformations>

⌘ Q.5 Constant of Variation
<https://www.ixl.com/math/algebra-2/find-the-constant-of-variation>

⌘ S.8 Solve Logarithmic Equations
<https://www.ixl.com/math/algebra-2/solve-logarithmic-equations-ii>

⌘ T.7 General to Vertex Form
<https://www.ixl.com/math/algebra-2/convert-equations-of-parabolas-from-general-to-vertex-form>

⌘ X.1 Radians to Degrees
<https://www.ixl.com/math/algebra-2/convert-between-radians-and-degrees>

This work was independently completed by _____.
Student Name

Student Signature

Date

Parent Signature

Date

**Bring this completed and signed checklist to your math class on the first day of school.*