

## **Algebra II**

### **Summer Review**

The purpose of Algebra II is to build on the algebraic and geometric concepts that you have previously learned. In this course you will gain a more complete understanding of topics like: functions and their characteristics, systems of equations, advanced polynomials, quadratics, imaginary and complex numbers, geometric and arithmetic sequences, and some basic concepts related to trigonometric functions.

The goal of the course is not simply for you to be able to solve math problems. Instead, Algebra II will provide you with an opportunity to use mathematical concepts as a tool to analyze and to think more critically. Proficiency in Algebra II topics will open the doors and give you access to and appreciation for higher level math classes like Calculus.

Please review the attached Khan Academy videos/articles and complete the accompanying exercises. Each student entering Algebra II in The Fall of 2021 is expected to be able to discuss the basic elements of the videos, exercises, and the articles that are presented below. I look forward to collaborating with you during the 2021 - 2022 school year. I can be reached at [323162@dadeschools.net](mailto:323162@dadeschools.net) if you have any questions. Thank you.

Introduction to Functions:

[What-is-a-function](#)

Interval Notation and Domain and Range of Functions:

<https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:functions/x2f8bb11595b61c86:introduction-to-the-domain-and-range-of-a-function/v/introduction-to-interval-notation>

Systems of Equations Elimination:

<https://www.khanacademy.org/math/8th-engage-ny/engage-8th-module-4/8th-module-4-topic-d/a/systems-of-equations-with-elimination>

Systems of Equations Substitution:

<https://www.khanacademy.org/math/8th-engage-ny/engage-8th-module-4/8th-module-4-topic-d/a/systems-of-equations-with-substitution>

Introduction to Polynomials:

<https://www.khanacademy.org/math/algebra/x2f8bb11595b61c86:quadratics-multiplying-factoring/x2f8bb11595b61c86:multiply-monomial-polynomial/v/polynomials-intro>