

Summer Math Homework for Students Entering Algebra 2
The Christian School at Castle Hills

Dear Students and Parents,

I am so excited to be serving as your Algebra 2 teacher this coming school year. To ensure that you are equipped with pre-requisite knowledge, and to help you avoid the “Summer Slide” that often comes with a summer away from school, I am asking that all students complete the attached summer math homework. **This assignment is required and will be due at the beginning of the school year. It will serve as your first TWO quiz grades.**

Please do not try to complete the packet all at once, but rather pace it out over the course of the summer to keep your mind sharp and working all summer long.

For each section, **complete the problems on a separate sheet of paper** with the title and section number clearly marked at the top of your page. Please complete graphing problems on graph paper. **Show all work in pencil** and box in your answers or provide an answer column to assist me in grading. When you have completed a section, check your answers against the provided answer key and then **correct any problems that you missed in grading pen or pencil**. You will get full credit for corrected answers. The goal is to make sure you are comfortable with each topic. You may work the sections in any order, but **please be sure to turn in your packet with the pages in the order given**. If you get stuck, I have linked reference materials and notes for each section. If you need or want additional practice, Khan academy is a really great and free resource.

It is my hope that this packet will help you to enter your Algebra 2 coursework with confidence. If you have any questions about the assignment, feel free to email me. I will be checking email once a week over the summer. You can also reach out to the secondary office if you need a quick reply.

In His Service,

Mrs. Courtney Thompson
Secondary Mathematics
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Summer Math Practice and Recommended Pacing:

June: Functions and Function Notation:

Week 1: [Evaluating Function and Function Notation Practice](#) and [Answers](#)

- Kahn Academy Video: [What is a Function?](#)
- Complete Kahn Academy Lesson with Practice: [Functions](#)

Week 2: [Linear Functions and Slope Intercept Form](#)

- Khan Academy Video: [Introduction to Slope Intercept Form](#)
- Complete Khan Academy Lesson with Practice: [Slope Intercept Form](#)

Week 3: [Standard Form of Linear Functions](#)

- Kahn Academy Video: [Introduction to Standard Form](#)
- Complete Kahn Academy Lesson with Practice: [Standard Form](#)

Week 4: [Graphing Quadratic Functions](#)

- YouTube Video/Lesson: [Graphing Quadratics](#)
- Complete Kahn Academy Lesson with Practice: [Quadratic Equations and Functions](#)

July: Types of Expressions and Equations

Week 1: [Simplify Expressions and Operations with Polynomials](#)

- Kahn Academy Video: [Polynomial Review and Addition/Subtraction](#)
- Kahn Academy Video: Multiplying Polynomials: [Multiplying Binomials and Polynomials](#)
- Complete Kahn Academy Lesson with Practice: [Polynomial Arithmetic](#)

Week 2: [Solving Multi-Step Equations](#)

- You Tube Video/Lesson: [Multi-Step Equations](#)
- Complete Kahn Academy Unit: [Multistep Equations and Inequalities](#)

Week 3: [Exponent Rules Notes and Exercises](#)

- [Kahn Academy Exponent and Radical Lesson](#) (see below as well)

Week 4: [Simplify Radicals](#)

- YouTube Video/Lesson: [Simplify Square Roots and Cube Roots](#)
- YouTube Video/Lesson: [Simplify Radicals with Variables](#)
- [Kahn Academy Exponent and Radical Lesson](#) (see above as well)

August: Factoring Review and Practice

Week 1: [Factoring Quadratics: Mixed Methods](#)

- Kahn Academy Video: [Factoring GCF and Basic Trinomials](#)
- Kahn Academy Video: [Factoring with Difference of Squares](#)
- Kahn Academy Video: [Factoring with Grouping \(When leading coefficient is not 1\)](#)

Week 2: [Factoring Polynomials and Multi-Step Factoring](#)

- Kahn Academy Video: [Factoring Higher Degree Polynomials](#)