# Summer Math Homework for Students Entering Algebra 1 The Christian School at Castle Hills

Dear Students and Parents,

I am so excited to be serving as your Algebra 1 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. **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, you can go to the IXL additional practice link. IXL has video instructions as well that you may find helpful.

It is my hope that this packet will help you to enter your Algebra 1 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 Homework for Students Entering Algebra 1 The Christian School at Castle Hills

## Summer Math Practice and Recommended Pacing:

#### June: Rational Numbers

# **Week 1: Operations With Rational Numbers**

- → Resources/Notes:
  - ◆ Operations with Fractions and Decimals Cheat Sheet
  - ◆ Integer Operations Cheat Sheet
- → Optional Additional Practice IXL:
  - ◆ Operations with Decimals
  - Add and Subtract Fractions
  - Multiply Fractions
  - ◆ Divide Fractions
  - ◆ Add, Subtract, Multiply and Divide Integers

#### Week 2: Operations with Positive and Negative Fractions and Decimals

→ Optional Additional Practice IXL: <u>Operations with Rational Numbers</u>

### **Week 3: Order of Operations Practice**

- → Resources/Notes: Order of Operations Cheat Sheet
- → Optional Additional Practice IXL: <u>Evaluating Expressions</u>

# **Week Percent of a Number Practice**

- → Resources/Notes:
  - Percent Equation Notes
  - Percent Proportion Notes
- → Optional Additional Practice IXL: Percent Equation

#### July: Equations and Expressions

# Week 1: Equations: One and Two Step and Proportions Practice

- → Resources/Notes: <u>Proportions and Equations Cheat Sheets</u>
- → Optional Additional Practice IXL:
  - Proportions Practice
  - ◆ One Step Equations
  - ◆ Two Step Equations

# **Week 2: Simplify Variable Expressions Practice**

- → Resources/Notes: <u>Simplify Expressions Cheat Sheet</u>
- → Optional Additional Practice IXL:
  - ◆ Combine Like Terms
  - Distributive Property

#### **Week 3: Literal Equations Practice**

- → Resources/Notes: Literal Equations Explanation and Cheat Sheet
- → Optional Additional Practice IXL: Rearrange Multi-Variable Equations

### Week 4: Exponents and Exponent Properties Notes and Practice

- → Resources/Notes: <u>Properties/Rules of Exponents Cheat Sheet</u>
- → Optional Additional Practice IXL:
  - ◆ Multiply and Divide Powers with Variable Bases
  - ◆ Power of a Power Rules

# Summer Math Homework for Students Entering Algebra 1 The Christian School at Castle Hills

August: Inequalities and Formulas

Week 1: Solve and Graph Two-Step Inequalities

- → Resources/Notes: Inequalities Cheat Sheet
- → Optional Additional Practice IXL: Solve and Graph Two Step Inequalities

Week 2: Geometry and Measurement Formulas Practice

- → Resources/Notes: <u>Formula Chart</u>
- → Optional Additional Practice IXL:
  - ◆ <u>Perimeter</u>
  - ◆ Area
  - ◆ Circumference and Area of Circles
  - ♦ Volume of Prisms and Pyramids
  - ◆ <u>Volume of Cylinders</u>
  - ◆ Volume of Cones