



## **RVGS Summer Assignment For Rising Algebra II Students**

**Introduction:** This set of practice problems on Deltamath.com website provides a review of Algebra I topics and mental math skills that will help you be successful in Algebra II. By completing this review during the summer, you will keep your brain mathematically active, and identify concepts and skills that you need to strengthen for your year ahead.

### ***Instructions:***

1. Create an account on <https://deltamath.com> .
2. Complete all exercises from all 5 sections without using a calculator.
3. You may use pencil and paper to work out problems prior to entering you answer(s) on Deltamath.com website.
4. You may not get help from another person, such as a tutor, teacher, peer, or family member.
5. Each section has a number of problems to complete (correctly) before the section is finished 100%. If you answer incorrectly, the program will show you the correct steps to complete the problem. Deltamath will provide additional problems to attempt until you have answered correctly the number of problems assigned to that section. If you need help, please use the suggested resources outlined in this document. You may also use other online resources or textbooks.
6. If you are still struggling with concepts or problems please email us at any time with your questions. We will be happy to help you be successful.

Mr. Don Wages at: [dwages@rvgs.k12.va.us](mailto:dwages@rvgs.k12.va.us)

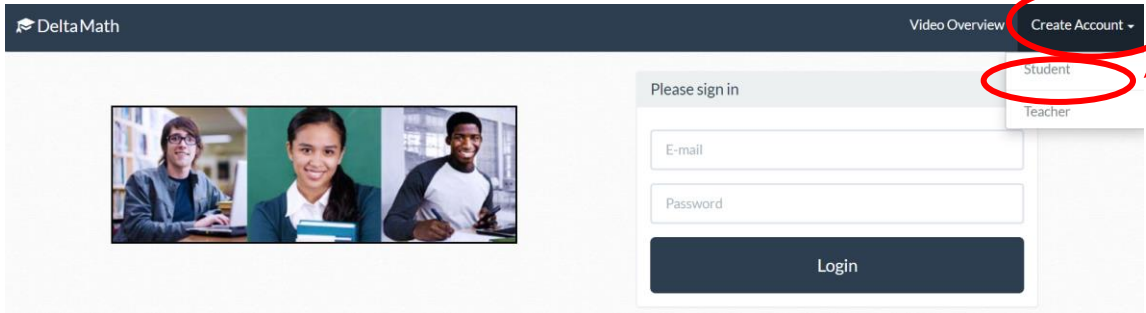
Mr. Matthew Browning at: [mbrowning@rvgs.k12.va.us](mailto:mbrowning@rvgs.k12.va.us)

7. You may complete each unit (or parts of each unit) in any order you choose. If you are struggling with one concept or unit, you may continue with another unit. Please follow up with Mr. Browning or Mr. Wages if you are in need of assistance. Again, we are available to help you recall these concepts over the summer.

**Go to next page to get started on your RVGS Summer  
Assignment**

To get started on your RVGS Algebra II Summer Assignment, navigate to the website:

[www.deltamath.com](http://www.deltamath.com)



Click on “Create Account” followed by “Student”

Create Student Account

Teacher Code:

In the Teacher Code box type: **243444**

Student and Login Information:

Section:

First Name:

Last Name:

Email:

Email (verify):

Password:

Password (verify):

Create Account ✓

Cancel

Enter your First Name, Last Name, Email address, & password, then click Create Account!

You are ready to get started on your Summer Assignment! Good luck!

## Helpful videos for RVGS Algebra II Summer Assignment

- I. Essential Mental Math Skills
  - a. Adding & Subtracting Fractions Visually
    - i. <https://www.khanacademy.org/math/arithmetic/fraction-arithmetic/arith-review-add-sub-fractions/v/visually-adding-fractions-with-unlike-denominators>
    - ii. <https://www.khanacademy.org/math/arithmetic/fraction-arithmetic/arith-review-add-sub-fractions/v/visually-subtracting-fractions-with-unlike-denominators>
- II. Evaluate & Simplify
  - a. Evaluating Functions
    - i. <https://www.khanacademy.org/math/algebra/algebra-functions/evaluating-functions/v/understanding-function-notation-example-1>
    - ii. <https://www.khanacademy.org/math/algebra/introduction-to-algebra/alg1-substitution/v/evaluating-expressions-in-two-variables?modal=1>
  - b. Simplifying Radicals
    - i. <https://www.khanacademy.org/math/algebra/rational-exponents-and-radicals/alg1-simplify-square-roots/v/simplifying-square-roots-1>
  - c. Adding & Subtracting Radicals
    - i. <https://www.khanacademy.org/math/algebra-home/alg-exp-and-log/miscellaneous-radicals/v/adding-and-simplifying-radicals>
  - d. Multiply & Divide Radicals
    - i. <https://www.khanacademy.org/math/algebra-home/alg-exp-and-log/miscellaneous-radicals/v/how-to-rationalize-a-denominator>
- III. Exponent Rules
  - a. Exponent Properties
    - i. <https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals#pre-algebra-exponent-properties>
  - b. Negative Exponents
    - i. <https://www.khanacademy.org/math/pre-algebra/pre-algebra-exponents-radicals/pre-algebra-negative-exponents/v/negative-exponents?modal=1>
- IV. Solving Equations & Functions
  - a. Literal Equations
    - i. <https://www.khanacademy.org/math/algebra2/modeling-with-algebra/manipulating-formulas/v/example-of-solving-for-a-variable>
  - b. Solving Linear Equations
    - i. <https://www.khanacademy.org/math/algebra/one-variable-linear-equations/alg1-variables-on-both-sides/v/solving-equations-2?modal=1>
    - ii. <https://www.khanacademy.org/math/algebra/one-variable-linear-equations/alg1-equations-with-parentheses/v/solving-equations-with-the-distributive-property?modal=1>

- c. Solving Linear Inequalities
  - i. <https://www.khanacademy.org/math/algebra/one-variable-linear-inequalities/multi-step-inequalities/v/multi-step-inequalities?modal=1>
- d. Evaluate Function from Graph
  - i. <https://www.khanacademy.org/math/algebra/algebra-functions/evaluating-functions/v/understanding-function-notation-example-2?modal=1>
- e. Input vs. Output
  - i. <https://www.khanacademy.org/math/algebra/algebra-functions/function-inputs-and-outputs/v/matching-function-input-to-output-with-graph?modal=1>
- V. Distributive Property
  - a. Multiplying Polynomials
    - i. <https://www.khanacademy.org/math/algebra/introduction-to-polynomial-expressions/multiplying-binomials-2/v/multiplying-binomials?modal=1>
    - ii. <https://www.khanacademy.org/math/algebra/introduction-to-polynomial-expressions/multiplying-binomials-2/v/multiplying-binomials?modal=1>
  - b. Greatest Common Factor
    - i. <https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-polynomials-1-common-factors/v/algebraic-factoring-by-greatest-common-monomial-factor?modal=1>
    - ii. <https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-polynomials-1-common-factors/v/factoring-and-the-distributive-property-3?modal=1>
  - c. Factoring Using Distributive Property
    - i. <https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-polynomials-1-common-factors/v/factoring-linear-binomials?modal=1>
  - d. Difference of Squares
    - i. <https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-quadratics-diff-of-squares/v/difference-of-squares-intro?modal=1>
  - e. Factoring
    - i. Introduction to Grouping
      - 1. <https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-quadratics-2/v/factor-by-grouping-and-factoring-completely?modal=1>
    - ii. Factoring by Grouping
      - 1. <https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-quadratics-2/v/factoring-trinomials-by-grouping-4?modal=1>
    - iii. Factoring Perfect Squares

<https://www.khanacademy.org/math/algebra/polynomial-factorization/factoring-quadratics-perfect-squares/v/factoring-perfect-square-trinomials?modal=1>