

# Rising Advanced Algebra Summer Math Packet

Dear Parents,

Rockdale County Public Schools is committed to providing the best math education possible for your child. Due to the cumulative nature of mathematics, in order for your child to be successful in the coming school year, he/she must possess mastery of many concepts from his/her previous math classes. For this reason, we have created a summer math packet to ensure your child is up to date on his/her prerequisite math skills.

1. Complete the practice problems embedded in the summer packet **for the students who will be enrolled in Advanced Algebra during the Fall of 2020**. The use of DESMOS calculator can be found in their ClassLink calculator link on their laptop.



2. Students will submit their answers to the practice problems by clicking a link to a Microsoft Form. Answers will be checked and students will be given automatic feedback to see whether their answer is correct or incorrect.
3. The use of [www.khanacademy.org](http://www.khanacademy.org) can be helpful for students to use. Type in the learning target topic(s) in the search menu. Here, your son/daughter will find tutorials and extra practice problems. Have him/her watch the tutorials and do the extra practice problems. This website will let your child know if he/she is doing the work correctly.

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# Week 1

<b>Prerequisite Skill:</b> Operations with Fractions	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can simplify fractions.</li><li>✓ I can perform the four basic operations with fractions.</li></ul>
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Simplifying Fractions</a> <a href="#">Operations with Fractions Review</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

<b>Prerequisite Skill:</b> Solving Two-Step Equations	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can find the solution(s) that satisfy a two-step equation.</li></ul>
<b>Instructional Videos</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Solving Two-Step Equations</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

## Week 2

<b>Prerequisite Skill:</b> Factoring Trinomials	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can factor polynomials in standard form (<math>ax^2 + bx + c</math>)</li><li>✓ I can explain how factoring and distribution are related.</li></ul>
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Factoring Trinomials</a> <a href="#">Factoring Trinomials with a Common Factor</a> <a href="#">Factoring Polynomials x method</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

<b>Prerequisite Skill:</b> Solving Quadratics by Factoring	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can use factoring as a method to solve quadratic equations.</li></ul>
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Solve quadratic equation using factoring</a> <a href="#">Solving quadratics by factoring</a> <a href="#">Bottoms Up Factoring Method</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

## Week 3

<b>Prerequisite Skill:</b> Simplifying Radicals (using square and cube roots)	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can find the square root of a number.</li><li>✓ I can break down a radical to find its square root.</li><li>✓ I can find the cube root of a number.</li></ul>
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Simplifying Radicals</a> <a href="#">Simplifying Radical Expressions (with fractions)</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

<b>Prerequisite Skill:</b> Solving Quadratics by Taking Square Roots	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can solve quadratic equations using the square root method.</li></ul>
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Solving Quadratics by Taking Square Roots (Perfect Square answers)</a> <a href="#">Solving Quadratics by Taking Square Roots Examples (Multi-Step)</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

## Week 4

<b>Prerequisite Skill:</b> Solving Quadratics by Completing the Square	<b>Learning Targets:</b>  ✓ I can solve quadratic equations by completing the square.
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Solving Quadratic Equations by Completing the Square</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

<b>Prerequisite Skill:</b> Solving Quadratics by using the Quadratic Formula	<b>Learning Targets:</b>  ✓ I can use the quadratic formula to solve quadratic equations.
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Deriving the Quadratic Formula and Examples</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

## Week 5

<b>Prerequisite Skill:</b> Adding and Subtracting Polynomials	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can add polynomials.</li><li>✓ I can subtract polynomials.</li></ul>
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Adding Polynomials</a> <a href="#">Subtracting Polynomials</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	

<b>Prerequisite Skill:</b> Multiplying Polynomials	<b>Learning Targets:</b> <ul style="list-style-type: none"><li>✓ I can multiply polynomials.</li></ul>
<b>Instructional Videos:</b> Watch the videos below for additional help with the prerequisite skills (press Ctrl and click to follow the link).  <a href="#">Multiplying Polynomials 1 (Monomial by Polynomial)</a> <a href="#">Multiplying Polynomials 2 (Binomial by Binomial)</a>	
<b>Practice Problems:</b>  <a href="#">CLICK HERE</a> to complete the practice problems (press Ctrl and click to follow the link).	