

Dear Upcoming Algebra 1 students,

This year, you will find that your summer work is different than it has been in years past. This summer you will be taking advantage of a program at [khanacademy.org](https://www.khanacademy.org) entitled, "Getting Ready for Algebra 1." This program covers all of the topics that students should be comfortable with in order to succeed in Algebra.

Some of the topics covered will be familiar to you, and some are new to you. However, the advantage to providing your summer work in this format means that you do not have to have immediate recall of topics learned, or even that topics you have not learned will be out of your reach. The videos in the program teach all the necessary information in an easy, understandable way and provide ample opportunities for practice and immediate feedback. Also, because you can watch a video or complete an exercise as many times as you like, if you're struggling with a concept, and mom and dad aren't sure how to do it either, THEY can watch the videos to learn and then be able to help you. *Be aware that I have not included ALL of the topics in this program, but have chosen what I think are the most relevant topics for you to review and learn.*

To access the material, you will need to sign up for a [khanacademy.org](https://www.khanacademy.org) account and enter my class code. A **quarter page sheet of instructions** are attached to this page that take you through the necessary steps. Creating your account using your St. Rose Google account login is your best option. ("Sign up with Google.") Once the account has been created, you will be able to see the work you need to do under the "Assignments" tab on the left hand side of your class page.

Attached to this packet, you will also find the check-off spreadsheet that I will be collecting the first full day of school. While *I will be able to monitor your progress throughout the summer* from my [khanacademy Teacher Dashboard](https://www.khanacademy.org/teacher), I still want you to *turn in a physical assignment*. You should record your final scores on the exercises, quizzes, and unit tests, and have your parents initial that each item was completed (all the yellow boxes.)

If you have any difficulty accessing the [khanacademy](https://www.khanacademy.org) material, I will be at school frequently throughout the summer, and I will check my email daily. You can send me a message at kquinby@saintrose.org or leave a message at extension 1052, and I will get back to you as soon as I can.

I know you would like to enjoy your summer without thinking about school, but please do not procrastinate doing this work. This may look like a lot, but the videos are short and the exercises, quizzes, and tests are, too. You should be able to complete everything in approximately 3 30-minute sessions per week. Then, you will begin the 8th grade with a firm Algebra 1 foundation, which will allow us to move through the Algebra 1 material in a thorough and timely manner, setting you up well for your high school mathematics classes..

Have a great summer, and God bless!

Mrs. Quinby

Unit 1 - Get ready for equations and inequalities

Lesson 1 - Algebraic equation basics

	Item to complete	Your Score	Out of	Parent initials
Variables, expressions, & equations	Video			
Testing solutions to equations	Video			
Testing solutions to equations	Exercise	<input type="text"/>	7	

Lesson 2 - One-step addition and subtractions equations

	Item to complete	Your Score	Out of	Parent initials
One-step addition and subtraction equations	Video			
One-step addition equations	Video			
One-step addition and subtraction equations	Exercise	<input type="text"/>	7	

Lesson 3 - One-step multiplication and division equation

	Item to complete	Your Score	Out of	Parent initials
One-step division equations	Video			
One-step multiplication equations	Video			
One-step multiplication and division equations	Exercise	<input type="text"/>	7	

Lesson 4 - Finding mistakes in one-step equations

	Item to complete	Your Score	Out of	Parent initials
Finding mistakes in one-step equations	Video			
Find the mistake in one-step equations	Exercise	<input type="text"/>	4	
QUIZ 1	Quiz	<input type="text"/>	5	

Lesson 5 - Intro to inequalities with variables

	Item to complete	Your Score	Out of	Parent initials
Plotting inequalities	Video			
Plotting an inequality example	Video			
Inequality from graph	Exercise	<input type="text"/>	4	
Plotting inequalities	Exercise	<input type="text"/>	4	

Lesson 6 - Testing solutions to inequalities

	Item to complete	Your Score	Out of	Parent initials
Testing solutions to inequalities	Video			
Testing solutions to inequalities	Exercise	<input type="text"/>	4	

QUIZ 2

Quiz

5

Lesson 7 - Combining like terms

	Item to complete	Your Score	Out of	Parent initials
Intro to combining like terms	Video			<input type="text"/>
Combining like terms with negative coefficients	Video			<input type="text"/>
Combining like terms with negative coefficients	Exercise	<input type="text"/>	7	<input type="text"/>
Combining like terms with rational coefficients	Video			<input type="text"/>
Combining like terms with rational coefficients	Exercise	<input type="text"/>	4	<input type="text"/>

Lesson 8 - The distributive property and equivalent expressions

	Item to complete	Your Score	Out of	Parent initials
The distributive property with variables	Video			<input type="text"/>
Factoring with the distributive property	Video			<input type="text"/>
Distributive property with variables (negative numbers)	Exercise	<input type="text"/>	4	<input type="text"/>
Combining like terms with negative coefficients and distribution	Video			<input type="text"/>
Combining like terms with negative coefficients and distribution	Exercise	<input type="text"/>	4	<input type="text"/>
Equivalent expressions: negative numbers & distribution	Video			<input type="text"/>
Equivalent expressions: negative numbers & distribution	Exercise	<input type="text"/>	7	<input type="text"/>

QUIZ 3

Quiz

7

Lesson 9 - Two-step equations

	Item to complete	Your Score	Out of	Parent initials
Same thing to both sides of equations	Video			<input type="text"/>
Intro to two-step equations	Video			<input type="text"/>
Two-step equations intuition	Video			<input type="text"/>
Worked example: two step equations	Video			<input type="text"/>
Two-step equations	Exercise	<input type="text"/>	7	<input type="text"/>

Lesson 10 - Finding mistakes in two-step equations

	Item to complete	Your Score	Out of	Parent initials
Find the mistake : two-step equations	Video			<input type="text"/>
Find the mistake : two-step equations	Exercise	<input type="text"/>	4	<input type="text"/>

Lesson 11 - One- and two-step inequalities

	Item to complete	Your Score	Out of	Parent initials
One-step inequalities examples	Video			<input type="text"/>
One-step inequalities: $-5c \leq 15$	Video			<input type="text"/>
One-step inequalities	Exercise	<input type="text"/>	7	<input type="text"/>

	Two-step inequalities	Video	<input type="text"/>		<input type="text"/>
	Two-step inequalities	Exercise	<input type="text"/>	7	<input type="text"/>
QUIZ 4		Quiz	<input type="text"/>	5	<input type="text"/>

Lesson 12 - Equations with variables on both sides

	Item to complete	Your Score	Out of	Parent initials
Intro to equations with variables on both sides	Video			<input type="text"/>
Equations with variables on both sides	Video			<input type="text"/>
Equations with variables on both sides	Exercise	<input type="text"/>	4	<input type="text"/>

Lesson 13 - Equations with parentheses

	Item to complete	Your Score	Out of	Parent initials
Equations with parentheses	Video			<input type="text"/>
Equations with parentheses	Exercise	<input type="text"/>	4	<input type="text"/>

QUIZ 5

Quiz	<input type="text"/>	5	<input type="text"/>
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UNIT TEST

Test	<input type="text"/>	12	<input type="text"/>
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Unit 2: Get ready for working with units

Lesson 1 - Intro to ratios

	Item to complete	Your Score	Out of	Parent initials
Intro to ratios	Video			<input type="text"/>
Basic ratios	Video			<input type="text"/>
Part:whole ratios	Video			<input type="text"/>
Basic ratios	Exercise	<input type="text"/>	7	<input type="text"/>

Lesson 2 - Equivalent ratios

	Item to complete	Your Score	Out of	Parent initials
Equivalent ratios	Video			<input type="text"/>
Equivalent ratios: recipe	Video			<input type="text"/>
Equivalent ratios	Exercise	<input type="text"/>	4	<input type="text"/>
Equivalent ratios word problems	Video			<input type="text"/>
Equivalent ratios with equal groups	Exercise	<input type="text"/>	4	<input type="text"/>
Equivalent ratios word problems	Exercise	<input type="text"/>	4	<input type="text"/>
Understanding equivalent ratios	Video			<input type="text"/>
Equivalent ratios in the real world	Exercise	<input type="text"/>	4	<input type="text"/>
Understand equivalent ratios in the real world	Exercise	<input type="text"/>	4	<input type="text"/>

Quiz 1

5

Lesson 3 - Ratio application

	Item to complete	Your Score	Out of	Parent initials
Ratios on coordinate plane	Video			<input type="text"/>
Ratios on coordinate plane	Exercise	<input type="text"/>	4	<input type="text"/>
Ratios and measurement	Video			<input type="text"/>
Ratios and units of measurement	Exercise	<input type="text"/>	4	<input type="text"/>
Part to whole ratio word problems	Video			<input type="text"/>
Part-part-whole ratio word problems	Exercise	<input type="text"/>	4	<input type="text"/>

QUIZ 2

Quiz

5

Lesson 4 - Intro to rates

	Item to complete	Your Score	Out of	Parent initials
Intro to rates	Video			<input type="text"/>
Solving unit rate problem	Video			<input type="text"/>
Solving unit price problem	Video			<input type="text"/>
Unit rates	Video	<input type="text"/>	7	<input type="text"/>

Lesson 5 - Rate problems

	Item to complete	Your Score	Out of	Parent initials
Rate problems	Video			<input type="text"/>
Rate problems	Exercise	<input type="text"/>	4	<input type="text"/>
Rates with fractions	Video			<input type="text"/>
Rates with fractions	Exercise	<input type="text"/>	4	<input type="text"/>
Comparing rates example	Video			<input type="text"/>
Comparing rates	Exercise	<input type="text"/>	4	<input type="text"/>

QUIZ 3

Quiz

5

UNIT TEST

Test

10

Unit 5: Get ready for linear relationships

Lesson 1 - Constant of proportionality

	Item to complete	Your Score	Out of	Parent initials
Introduction to proportional relationships	Video			<input type="text"/>
Identifying constant of proportionality	Video			<input type="text"/>
Constant of proportionality from graph	Video	<input type="text"/>		<input type="text"/>

Constant of proportionality from graphs	Exercise	<input type="text"/>	4	<input type="text"/>
Identifying the constant of proportionality from equation	Video			<input type="text"/>
Constant of proportionality from equation	Video			<input type="text"/>
Constant of proportionality from equations	Exercise	<input type="text"/>	4	<input type="text"/>
Constant of proportionality from tables	Video			<input type="text"/>
Constant of proportionality from tables	Exercise	<input type="text"/>	4	<input type="text"/>
Constant of proportionality from tables (with equations)	Video			<input type="text"/>
Constant of proportionality from tables (with equations)	Exercise	<input type="text"/>	4	<input type="text"/>
QUIZ 1	Quiz	<input type="text"/>	7	<input type="text"/>

Lesson 5 - Writing and solving proportions

	Item to complete	Your Score	Out of	Parent initials
Worked example: Solving proportions	Video			<input type="text"/>
Solving proportions	Exercise	<input type="text"/>	7	<input type="text"/>
Writing proportions example	Video			<input type="text"/>
Writing proportions example	Exercise	<input type="text"/>	4	<input type="text"/>
Proportion word problem: cookies	Video			<input type="text"/>
Proportion word problem: hot dogs	Video			<input type="text"/>
Proportion word problems	Exercise	<input type="text"/>	4	<input type="text"/>

Unit 4: Get ready for functions and sequences

Lesson 1 - Math patterns

	Item to complete	Your Score	Out of	Parent initials
Factors and multiples: days of the week	Video			<input type="text"/>
Patterns with numbers	Exercise	<input type="text"/>	4	<input type="text"/>
Math patterns: table	Video			<input type="text"/>
Math patterns: toothpicks	Video			<input type="text"/>
Patterns with shapes	Exercise	<input type="text"/>	4	<input type="text"/>

Lesson 4 - Linear models

	Item to complete	Your Score	Out of	Parent initials
Linear equations word problems	Video			<input type="text"/>
Modeling with linear equations: snow	Video			<input type="text"/>
Linear equations word problems	Exercise	<input type="text"/>	4	<input type="text"/>

YOU ARE DONE!!!



How to join your teacher's Khan Academy class

- ① Go to khanacademy.org/join
- ② Enter your class code and press "Add".
Class code: PWX3Z4GN
- ③ If you don't already have an account, press "Create a new account". Enter your date of birth, then sign up using Google, your school email, or by creating a username.
- ④ Enter your grade and course. Now you're ready to start learning!