



## 8th Grade Algebra

*Khan Academy - Get Ready for Algebra 1*

Students,

Your summer work this year will be watching videos and taking mini-assessments at Khan Academy. I have assigned work at [khanacademy.org](https://khanacademy.org) for you to complete throughout the summer. Attached to this letter, you will find a printed list of assignments. The yellow spaces are for recording scores and parent initials.

Follow these instructions to access your assignments:

1. Go to [khanacademy.org/join](https://khanacademy.org/join)
2. Enter this class code: **TV4YACT7**
3. Click “Create a new account”
4. Enter your birthdate
5. If you remember your school login and password, “Sign up using Google,” and enter the requested information. Go to Step 7).

1. If you do not remember your school login or password, “Sign up by creating a username,” and enter the requested information. If you use this option, I insist that you create a username that allows me to know who is completing the work. Also, **WRITE THE NEW ACCOUNT INFORMATION DOWN** so that if you go somewhere other than home during the summer and want to complete some work there, you have what you need.

1. Click “Continue” and your assignment page will come up.

**UNDER NO CIRCUMSTANCES** are you to create a second account at any point this summer. If you forget your login information, email me at [kquinby@saintrose.org](mailto:kquinby@saintrose.org) and I will reset your password and send that and your username to you.

Remember, I will be able to see your progress throughout the summer. Please do not wait until the last minute to begin these assignments. Make a plan for completing the work, taking into account already-scheduled time that you will be away from home. Go through the assignments in order, and have your parents initial when you have watched the videos and completed the exercises. Be sure to write the score you received on each exercise in the appropriate box on the sheet. The completed spreadsheet is due on the first full day of class and will count as your first **test** grade (I will be cross-checking the paper with the information I can see at the website on my teacher dashboard.) There will be a **quiz** over the summer work during the first week of school.

If you begin early, you will not have to fret about getting everything done. You can do this the hard/easy way (buckle down, start early, stay steady, be done and have nothing left to do for the couple of weeks before school starts), or the easy/hard way (forget about the work till the last minute, panic, spend several days at the end of your summer doing nothing but math.)

Enjoy your summer, and I will see you in August!

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		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		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		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		4	
<b>QUIZ 1</b>	Quiz		5	

**Lesson 5 - Intro to inequalities with variables**

	Item to complete	Your Score	Out of	Parent initials
Plotting inequalities on a number line	Video			
Plotting an inequality example	Video			
Inequality from graph	Exercise		4	
Plotting inequalities	Exercise		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		4	
<b>QUIZ 2</b>	Quiz		5	

**Lesson 7 - Combining like terms**

	Item to complete	Your Score	Out of	Parent initials
Intro to combining like terms	Video			

Combining like terms with negative coefficients	Video			
Combining like terms with negative coefficients	Exercise		7	
Combining like terms with rational coefficients	Video			
Combining like terms with rational coefficients	Exercise		4	

### Lesson 8 - The distributive property and equivalent expressions

	Item to complete	Your Score	Out of	Parent initials
The distributive property with variables	Video			
Factoring with the distributive property	Video			
Distributive property with variables (negative numbers)	Exercise		4	
Combining like terms with negative coefficients and distribution	Video			
Combining like terms with negative coefficients and distribution	Exercise		4	
Equivalent expressions: negative numbers & distribution	Video			
Equivalent expressions: negative numbers & distribution	Exercise		7	
<b>QUIZ 3</b>	Quiz		7	

### Lesson 9 - Two-step equations

	Item to complete	Your Score	Out of	Parent initials
Same thing to both sides of equations	Video			
Intro to two-step equations	Video			
Two-step equations intuition	Video			
Worked example: two step equations	Video			
Two-step equations	Exercise		7	

### Lesson 10 - Finding mistakes in two-step equations

	Item to complete	Your Score	Out of	Parent initials
Find the mistake : two-step equations	Video			
Find the mistake : two-step equations	Exercise		4	

### Lesson 11 - One- and two-step inequalities

	Item to complete	Your Score	Out of	Parent initials
One-step inequalities examples	Video			
One-step inequalities: $-5c \leq 15$	Video			
One-step inequalities	Exercise		7	
Two-step inequalities	Video			
Two-step inequalities	Exercise		7	
<b>QUIZ 4</b>	Quiz		5	

### 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			
Equations with variables on both sides	Video			
Equations with variables on both sides	Exercise		4	

**Lesson 13 - Equations with parentheses**

	Item to complete	Your Score	Out of	Parent initials
EQUATIONS WITH PARENTHESES	Equations with parentheses	Video	4	
	Equations with parentheses	Exercise		
	QUIZ 5	Quiz	5	
UNIT TEST	Test		12	

**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	Intro to ratios	Video	7	
	Basic ratios	Video		
	Part:whole ratios	Video		
	Basic ratios	Exercise		

**Lesson 2 - Equivalent ratios**

	Item to complete	Your Score	Out of	Parent initials
EQUIVALENT RATIOS	Equivalent ratios	Video	4	
	Equivalent ratios: recipe	Video		
	Equivalent ratios	Exercise		
	Equivalent ratios word problems	Video		
	Equivalent ratios with equal groups	Exercise		
	Equivalent ratios word problems	Exercise		
	Understanding equivalent ratios	Video		
	Equivalent ratios in the real world	Exercise		
	Understand equivalent ratios in the real world	Exercise		
	QUIZ 1			

**Lesson 3 - Ratio application**

	Item to complete	Your Score	Out of	Parent initials
RATIOS ON COORDINATE PLANE	Ratios on coordinate plane	Video	4	
	Ratios on coordinate plane	Exercise		
	Ratios and measurement	Video		
	Ratios and units of measurement	Exercise		
	Part to whole ratio word problem using tables	Video		
	Part-part-whole ratio word problems	Exercise		
QUIZ 2	Quiz		5	

**Lesson 4 - Intro to rates**

	Item to complete	Your Score	Out of	Parent initials
Intro to rates	Video			
Solving unit rate problem	Video			
Solving unit price problem	Video			
Unit rates	Exercise		7	

**Lesson 5 - Rate problems**

	Item to complete	Your Score	Out of	Parent initials
Rate problems	Video			
Rate problems	Exercise		4	
Rates with fractions	Video			
Rates with fractions	Exercise		4	
Comparing rates example	Video			
Comparing rates	Exercise		4	

**QUIZ 3**

Quiz			5	
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**UNIT TEST**

Test			10	
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**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			
Identifying constant of proportionality	Video			
Constant of proportionality from graph	Video			
Constant of proportionality from graphs	Exercise		4	
Identifying the constant of proportionality from equation	Video			

Constant of proportionality from equation	Video			
Constant of proportionality from equations	Exercise		4	
Constant of proportionality from tables	Video			
Constant of proportionality from tables	Exercise		4	
Constant of proportionality from tables (with equations)	Video			
Constant of proportionality from tables (with equations)	Exercise		4	

**QUIZ 1**

Quiz			7	
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**Lesson 5 - Writing and solving proportions**

	Item to complete	Your Score	Out of	Parent initials
Worked example: Solving proportions	Video			

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!!!**