



Summer Math Work - Khan Academy Guide

2024-2025 School Year

Why Khan Academy

- Khan Academy offers tremendous resources that students can explore on their own to further their math education beyond what is assigned.
- Khan Academy is frequently used in classrooms, so students becoming acclimated to the platform will enable success during the school year.
- Khan Academy is free for users.
- Khan Academy also has college level courses and AP courses that parents can have students explore to find out possible course interest for the future.
- Khan Academy offers prep for PSAT, ACT, and SAT that students can get students working on in advanced to better prepare them for their admission tests.
- Lastly, teachers are able to see individual student mastery over key skill groups and reference it during the year to better help students.

What is Assigned?

- Students will be assigned work including quizzes, tests, or exercises. The number of questions will vary between courses with lower level math courses having easier questions but more units to cover, generally.
- Exercises are typically between 4 - 7 questions and focus on a specific skill; assignments typically take between minutes.
- Quizzes test multiple skills within a mastery unit; quizzes are 5 questions and take 7 - 15 minutes to complete.
- Tests measure competency on every skill within a unit; tests can range from 10 - 20 questions with time to complete ranging from around 15-45 minutes depending on number of questions.
- The majority of skills covered in the summer packet were likely covered in the student's math class this school year or the previous year (i.e. going from geometry to algebra 2, typically 1 year gap between algebras) or the year before.

How to Access

- Once student schedules are determined for next year, students will be added to the proper Khan Academy class group which will have the appropriate mastery skills and assignments for the given math class.
- First the students will need to create a Khan Academy account.
- After creating an account then they will be able to add their class by following the instructions on the next slide.



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: _____
- 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!

Class codes: go to www.khanacademy.org/join and enter code for the class you are going to be in next year

(For example, if I took Algebra this last year, then I would be taking Geometry class this next school year, so I would pick the Geometry class code to type in)

Mr. Hill

- 8th grade Math Class (Pre-Algebra)
 - 3FBVE4WK
- Algebra 1 Class
 - WQRX7JMH
- Geometry Class
 - DD587ZBE

Mr. Echols

- Algebra 2
 - 355B8N4Z
- Pre-Calculus
 - VPD6H7H6
- AP Calculus AB/BC
 - RHHQR85V
- AP Statistics
 - HUPBKJZG

Aids For Students

- When taking quizzes or tests, students can use a few aides to help them learn the material being covered.
- One tool students can use is hints!
- Once a student attempts a question, if their attempt is incorrect they will be given the option to “show a step”.
- This will mark the question as wrong but students will be given a hint to help them solve the problem.
- Students can retake quizzes and tests repeatedly without limit so we recommend retakes if a student wasn't able to solve the majority of questions correctly!

Quiz 3

Google Classroom

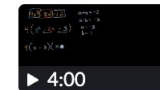
Factor completely.

$$7x^2 + 28x - 35 = \text{6}$$

Related content



Factoring quadratics with a common factor



Factoring completely with a common factor



Not quite!

Give it another try!

Show a step

Aids For Students - Cont.

- When students are working on their summer quizzes or tests, if they answer a question incorrectly, video resources will be recommended to them as well
- These videos explain the skills but are not required to be watched; they are purely supplemental.



Quiz 3

Google Classroom

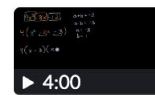
Factor completely.

$$7x^2 + 28x - 35 = \text{6}$$

Related content



Factoring quadratics with a common factor



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Not quite!

Give it another try!

Show a step

Aids For Students - Cont.

- Lastly, students can hit skip question if they are stuck and Khan Academy will give them the steps to solve the problem.
- Every step is specified to solve the question.
- Students do not get credit for these skipped questions but the explanations can help them for when they retake the quiz or tests.



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First, let's factor out the greatest common factor. If the leading coefficient is negative, we'll also factor out -1 .

The result will be something like this, where the blanks are coefficients:

$$\square(\square x^2 + \square x + \square)$$

Then, we can try to factor the sum like this:

$$\square(\square x + \square)(\square x + \square)$$

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Factor out a the greatest common factor

The greatest common factor is 7.

$$7x^2 + 28x - 35$$

$$= 7(x^2 + 4x - 5)$$

[How did we find the greatest common factor? ▾](#)

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Factor $x^2 + 4x - 5$

$$7x^2 + 28x - 35$$

$$= 7(x^2 + 4x - 5)$$

$$= 7(x - 1)(x + 5)$$

[I want to see this step in more detail. ▾](#)

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Answer

$$7x^2 + 28x - 35$$

How Assignment Will Be Graded

- The summer math assignments will be due on August 20, 2024.
- The grade will be included as a test grade for the first 9 weeks of school.
- More importantly, students who work on the skills covered in their math assignments will be well prepared to start the school year off in ready-form to learn new content from their class and spend less time catching up on information they forgot.

Conclusion

- We are excited for students to enjoy their summer and much deserved time off.
- We also know that “if you don’t use it, you lose it!”
- Our goal is to help students keep much of the knowledge they gained this past year and help set them up for success for next year.
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**Have a great summer and thank
you for a great school year!**

**We look forward to hearing about the exciting things you are
going to do this summer!**

**Jeremiah 29:11 - “For I know the plans I have for you,”
declares the Lord, “plans to prosper you and not to harm you,
plans to give you hope and a future.”**