

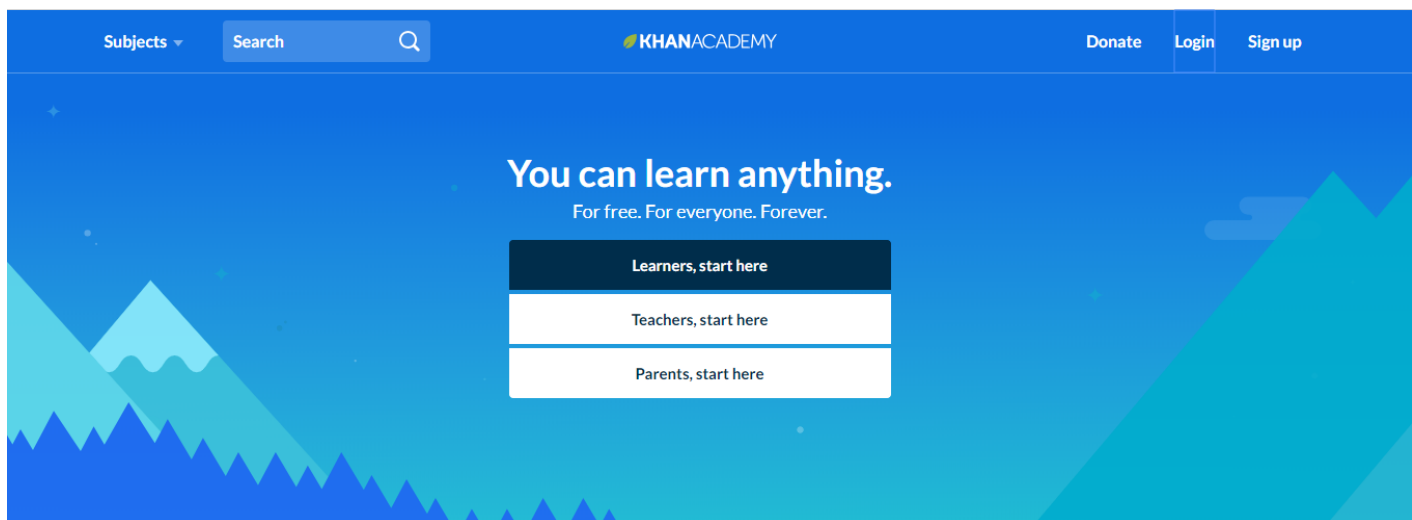
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## What is Khan Academy?

Khan Academy is a free website ([www.khanacademy.org](http://www.khanacademy.org)) with an extensive library of thousands of video lessons on topics that cover math, computer programming, science, art history, economics and more. In addition to the videos, there is a **practice** section dedicated to mathematics that allows students to work on improving their skills and learn new ones. Each question must be answered correctly before the next question is asked. There are hints (it is okay to use the hints!) and links to videos to help anyone that gets stuck on a particular question. The goal of Khan Academy is for students to **Master** skills. Each skill starts out as **Needs Practice**. Once you complete 3 - 5 questions right in a row for a skill you move to **Practiced**. In order to move up from **Practiced** you need to complete **Mastery Challenges**. Each correct answer in a **Mastery Challenge** will move you closer to **Mastery** for that skill.

**Mastery Challenges** are located in the **Dashboard** and become available after you complete the **PreTest**. The first time you login you will be directed to the PreTest once you choose a grade to work on.



## Khan Academy Into Screen

## What are ASMS students doing with Khan Academy?

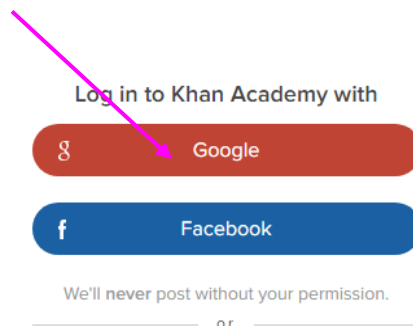
We are asking our students to use Khan Academy during summer to keep their math skills fresh. It is important to understand that the math classes at ASMS focus on all three aspects of mathematics: **skills, concepts and applications**. Khan Academy allows our students to practice their skills and, if they desire, learn new skills. It is not intended to be a substitute for the connections made to concepts and applications that are learned in class. No skill is off limits, and students are encouraged to explore and try to figure out new skills. **Be aware that completing advanced skill sections on Khan Academy does not mean that your child has mastered the mathematics around a given topic**, but has instead mastered a particular skill associated with a topic. During the summer we **do not** expect students to progress towards **Mastery** which can become very challenging. Instead we expect each student to attempt the exercises assigned to the best of his or her ability. This means that for some skills a student may not be able to get 5 in a row correct. **Our expectation is that each student will either get 5 questions in a row correct or attempt 10 problems total for each exercise. It is okay to use the hint button to help get the right answer.**

### What does my child need to use the site (the first time)?

In order to use Khan Academy, each student must Login using his/her Google account. Click on Login up in the upper right hand corner of the screen.

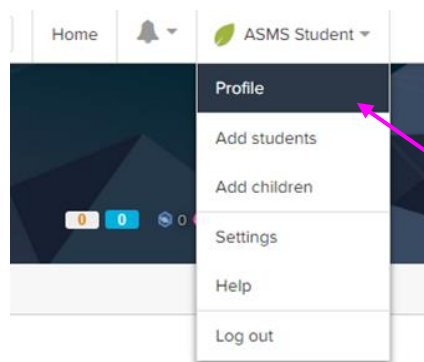


After you click on that you will be asked to choose to sign in with Facebook, Google, or an alternate email. Please choose "Sign in with Google."



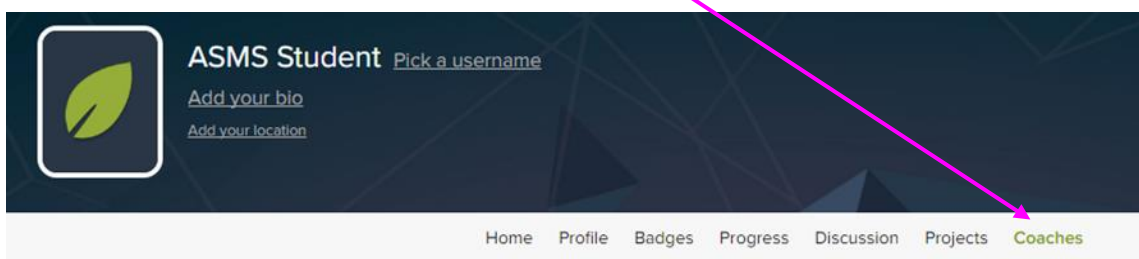
Enter your school email address, followed by your school email password. There may be a screen asking for permission for Khan Academy to access the Google

### How to Add a Coach



Once logged-in, each student needs to add Mr. Palm, Mr. Robbins and Mr. Weachock as his/her coaches. To do this, click on your name in the upper right hand corner, and choose **Profile**.

In the center of the screen is a menu. Choose **Coaches** from the right end of



Enter each teacher's email, one at a time, into the box below **Add a Coach** and hit **Join the Class**.

Coaches have access to all of your Khan Academy data.

### Add a coach

Enter a class code or your coach/teacher's email address:

Code (EK3ST7) or email (teacher@example.com)

Mr. Robbins' email is  
**robbinsld@tasms.com**

Mr. Weachock's is  
**weachockmb@tasms.com**

Mr. Palm's email is

### What does having a "Coach" mean?

By adding a coach, the teacher will be able to monitor the progress for each student. He will be able to see what topics they have practiced, how successful they were, and provide them with guidance if needed on other topics to try.

### What topics should my child complete over the summer?

One of the reasons we have chosen Khan Academy for our summer work is that each student may work at his/her own pace. There is no requirement to complete any new material (but

students can if they want to); instead, we are asking students to use the site to practice and reinforce existing skills.

The coaches can see which questions are correct and which questions are missed and will provide feedback and direction if necessary.

Please remember that in order to **complete an exercise** a student needs to either get 5 problems correct in a row or attempt a total of 10 problems.

## STUDENT MATH ASSIGNMENTS BY GRADE LEVEL

**Incoming 6th graders:** Complete each exercise by the end of August.

Please remember that in order to **complete an exercise** you need to either get 5 problems correct in a row or attempt a total of 10 problems.

- [Adding Decimals 1](#)
- [Order of Operations](#)
- [Subtracting Decimals](#)
- [Multi-digit Multiplication](#)
- [Multiplying Decimals 2](#)
- [Comparing Decimals 2](#)
- [Dividing Decimals 1](#)
- [Fractions on the Number Line](#)
- [Multiplying Fractions](#)
- [Dividing Fractions by Whole Numbers](#)
- [Dividing Whole Numbers by Fractions](#)
- [Adding Fractions with Unlike Denominators](#)
- [Subtracting Fractions with Unlike Denominators](#)
- [Graphing Points](#)
- [Quadrilateral types](#)
- [Comparing Decimal Place Value](#)
- [Ordering Decimals](#)
- [Understanding Moving the Decimal](#)

In addition to the Khan exercises, students should use the following website to practice their arithmetic skills: <http://arithmetic.zetamac.com/>

They should input the following settings:

## Arithmetic Game

The Arithmetic Game is a fast-paced speed drill where you are given two minutes to solve as many arithmetic problems as you can.

If you have any questions, please contact [arithmetic@zetamac.com](mailto:arithmetic@zetamac.com).

☒ Addition

Range: (  to  ) + (  to  )

☒ Subtraction

Addition problems in reverse.

☒ Multiplication

Range: (  to  ) × (  to  )

☒ Division

Multiplication problems in reverse.

Duration:  ▼

Start

Ideally, the student should practice the arithmetic website 10 times a month. However, if the student can get consistently 25-30 problems correct in 120 seconds, he or she does not need to continue practicing.

If the student is experiencing significant difficulties, he or she can practice each operation individually by un-checking the boxes.

**Incoming 7<sup>th</sup> graders:** Complete each exercise by the end of August.

Please remember that in order to **complete an exercise** you need to either get 5 problems correct in a row or attempt a total of 10 problems.

- [Order of operations](#)
- [Adding decimals: hundredths](#)
- [Subtracting decimals: hundredths](#)
- [Relate division to multiplication](#)
- [Fractions as division](#)
- [Equivalent fractions](#)
- [Multiply fractions and whole numbers visually](#)
- [Multiplying fractions](#)
- [Multiplying positive and negative fractions](#)
- [Combining like terms](#)
- [Evaluating expressions with one variable](#)
- [Evaluating expressions with two variables](#)
- [One-step addition & subtraction equations](#)
- [One-step multiplication & division equations](#)

**Incoming 8<sup>th</sup> graders:** Complete each exercise by the end of August.

Please remember that in order to **complete an exercise** you need to either get 5 problems correct in a row or attempt a total of 10 problems.

- [Adding fractions with unlike denominators](#)
- [Subtracting fractions with unlike denominators](#)
- [Multiplying positive and negative fractions](#)
- [Fraction multiplication as scaling](#)
- [Dividing positive and negative fractions](#)
- [Subtracting negative numbers](#)
- [Rates with fractions](#)
- [Plotting inequalities](#)
- [Negative exponents](#)
- [Multiply and divide powers](#)
- [Order of operations with negative numbers](#)
- [Evaluating expressions with one variable](#)
- [Evaluating expressions with two variables](#)
- [Combining like terms](#)
- [Combining like terms with distribution](#)
- [Writing basic expressions with variables](#)
- [Writing expressions with variables](#)
- [Interpreting linear expressions](#)
- [Identify dependent & independent variables](#)
- [Two-step equations](#)
- [Two-step equation word problems](#)