## Are you looking to keep your math skills strong for the new school year?

Consider using Khan Academy. Khan Academy offers practice exercises, instructional videos, and a personalized learning dashboard that empower learners to study at their own pace in and outside of the classroom. They tackle math, science, computing, history, art history, economics, and more, including K-14 and test preparation (SAT, Praxis, LSAT) content. They focus on skill mastery to help learners establish strong foundations, so there's no limit to what they can learn next!

The Get Ready courses are very comprehensive and focus on many of the skills that are recommended for success in any math course. Khan Academy designed the courses to help students master the most important skills they'll need for the next grade. What's more, students can use these courses to figure out where they may have gaps before they enter that grade.

Students start by taking a Course Challenge. The Course Challenge helps them understand what they need to review. If they have gaps for the grade they're entering in the fall, students spend their time mastering the important skills they need to fill those gaps. If they don't have gaps, students accelerate ahead and brush up on the skills they need for next school year.

They are flexible and you can adapt them to your needs. Just create an account using your school Google account and get started!

You can find the courses at the link below.

## **Khan Academy Get Ready Courses for Math**

Our recommendation is to choose skills that <u>you</u> feel <u>you</u> need to work on and use the videos, examples, exercises and other practice to help fill in any gaps in your math knowledge.

## How to use these courses:

We encourage our students to practice **metacognition**, which is sometimes described as "thinking about thinking". It is the ability to step back and take a "bird's eye view" of yourself and what you're doing, developing self-awareness of what problem-solving strategies work for you, and which ones don't. The metacognitive process, or cycle, involves three stages to coach through in order to improve their self-awareness and ultimately their executive functioning: **Self-Monitoring**, **Self-Evaluating**, and **Self-Regulation**.

**Self-Monitoring** is referred to as the observing stage, where you ask yourself "what am I doing?". Taking a step back, you look at the strategies you're trying to use, how you're going to use it, and you make sure you're following the plan.

**Self-Evaluating** is the judging stage, where you ask yourself "how am I doing?". After utilizing a strategy or technique for some time, you look at your performance and outcomes and judge how well it worked.

**Self-Regulating** is the modifying stage, where you ask yourself "what do I need to change?". If you had poor outcomes during the self-evaluating stage, this is where you change your strategy to something more effective. Sometimes that means the strategy didn't fit well with the environment, the task, or the person using it. However, you could also discover that your strategy resulted in increased performance and no change is necessary.

As you proceed through the courses, use this metacognitive cycle to learn more about yourself and your skills. Not all skills in these courses need to be mastered, but many should be practiced to self-assess your comfort level and your abilities.

## Tips:

- Start with the Course Challenge at the bottom to level up skills you already know and then focus only on the skills you need to improve.
- If you find some skills are too hard, we encourage you to check the Get Ready courses from previous grades to see if there are prerequisite skills that you need to practice.
- If you get a question wrong, click on "Get Hint" to see how to solve that problem. Then when you run into a similar problem, you'll know what to do!
- Math is a cumulative skill-based subject, you cannot just "look over" a topic, you must practice the skills to deepen your understanding.
- Write down your work! Writing forces you to process the information differently than completing it mentally and studies have shown that it improves retention.
- Make a note of skills that you struggled completing, your teacher can provide extra help at the beginning of the year to help you strengthen your skills in that area.