

Be a Better Math Student – Five Smart Tips

By Jessie Brumfiel

Many kids find it hard to do as well in math class as they would like. With smart approaches, either on your own or with a tutor, you can be more successful. Whether you're learning fractions, mastering algebra, studying geometry or pushing yourself with AP calculus – try these tips used by good math students.

Have a positive attitude.

Your attitude toward math is 100% in your control. If you find math tough, let that challenge motivate you, not discourage you. It does **not** mean that you're 'just not cut out' for math. Mental effort *should* feel hard: that's exactly how you build up your math brain. Good math students embrace effort, mistakes and uncertainty as a normal part of learning - they keep at it – and end up with big 'math muscles'!

Pay close attention to nuances.

Basketball players learn to read any defensive setup. They understand nuances that guide their chosen response - and help them score. In math, attention to the detail of each problem will guide your correct problem-solving response. Strengthen this ability by making sure you always understand *why* the step you are taking is called for to solve any particular problem. Avoid mindlessly and over-broadly applying a procedure.

Define your goals.

Do you want to raise a C to an A in algebra, pull up a geometry grade, or stay competitive in AP calculus? Set math goals for yourself that are meaningful to you and specific. Then enlist the help of your teacher, parents, or a math tutor to help you achieve them. You'll be more committed if you own the goal, and gather resources around you.

Drill and practice.

Good math students spend enough time working on a particular problem type or concept to really master it. They do problems, use flash cards, or quiz themselves until they can solve a type of problem correctly every time. Average math students might feel satisfied when they reach a correct answer 80% of the time. But this is a weak foundation on which to build more advanced math skills. If you lack motivation on your own, a math tutor can inspire you and keep you going.

Study math how you learn best.

Everyone learns in three ways – visual (seeing), auditory (hearing), and kinesthetic (hands-on). Most people have a preferred learning style, favoring either visual, auditory, or kinesthetic approaches to learning. Try to study math using

approaches that fit your style. If you're unsure how you like to learn, try all of these ideas and keep what works best for you.

- a. Color-code your learning. Use a colored pen set to distinguish ideas and concepts, associate like ideas, or highlight patterns in problems.
- b. Draw pictures, graphs, number lines, diagrams, flow charts, and illustrations.
- d. Write text-book material in your own words, in a notebook. Keep a journal of your new math knowledge and new questions you want to answer.
- e. Put what you are learning into your own words. Say it out loud to yourself in natural language. Say aloud what it reminds you of, or seems similar to.
- f. Explain to a friend or parent what you have learned. Tell them about the concept as if you were teaching them.
- g. Work with manipulatives – cubes, pattern blocks, etc. Jump on a trampoline while solving math problems, or recite multiplication tables while hopping.

By working to become a better math student, you'll earn higher grades and achieve the goals you set for yourself in math. You'll also build confidence and thinking skills that will help you succeed in all your other subjects, too.

Jessie Brumfiel benefited from math tutoring as a student at Santa Barbara High School. She earned a BA from Stanford University. She owns Spark Tutors, a tutoring business offering K-12 subject tutoring, SAT test prep tutoring, and study-skills tutoring for kids in Santa Barbara and San Luis Obispo county. She can be reached at (805) 284-9161 or www.SparkTutors.com.