

Get a “can do” attitude:

If you can do it in sports, music, dance, etc., you can do it in math! Try not to let fear or negative experiences turn you off of math.

Practice a little math every day:

It helps you build up your confidence and move your brain away from the panic button at test time.

Take advantage of your math class:

If you are a high school student, realize that most colleges and universities require at least college algebra for any bachelor’s degree. Some classes, like chemistry, nursing, statistics, etc. will require some algebra skills to succeed in them. If you are getting a bachelor’s degree, then chances are you are going for a professional job. Most professional jobs require at least some math. Granted, some more than others, but nonetheless math (problem solving, numbers, etc...) is everywhere. So make sure that you embrace your math experience and make the most of it.

Keep up with the homework:

It sounds simple but your time is limited, you have other classes’ homework, etc. Think of it this way:

Embrace your math experience and make the most of it!

No homework, no learning. Homework helps you practice the applications of math concepts. It’s like learning

how to drive: the longer you practice, the better your driving skills become and the more confidence you will have on the road. If you only read the driver’s manual, you’ll never learn to drive with confidence and skill. We suggest you try some of the unassigned problems, too, for extra practice.

Try to understand the math problems:

When you work homework problems, ask yourself what you are looking for and how you are going to get there. Don’t just follow the example. Work the problem step-by-step until you know why you are doing what you are and have arrived at the solution. If you follow the what, how, and whys, you’ll know what to do when you see a similar problem later.



Use index cards to study tests:

Here’s how you do that: When studying for a test, make sure you can understand the problems on each math concept as well as work them. Then make the index cards with problems on them. Mix the index cards (yes, shuffle the cards to mix them up) and set the timer. Start working the problems on each card as it is dealt to you. Oh, yeah, hide your textbook! This will simulate a math test taking experience.

Ask questions in class:

Don’t be ashamed to ask questions. The instructor WILL NOT make fun of you. In fact, at least one other person may have the same question.

(Continued from the previous page)

Ask questions outside of class:

OK, so like most people, you don't want to ask questions in class, OR you think of a question too late. Then go to the instructor's tutorials and ask away.

Check homework assignments:

Make sure that when you get your graded homework back you look over what you got right as well as what you missed.

Pay attention in class:

Math snowballs. If you don't stay alert to the instructor's presentation, you may miss important steps to learning concepts. Remember, today's information sets the foundation for tomorrow's work.

Don't talk in class:

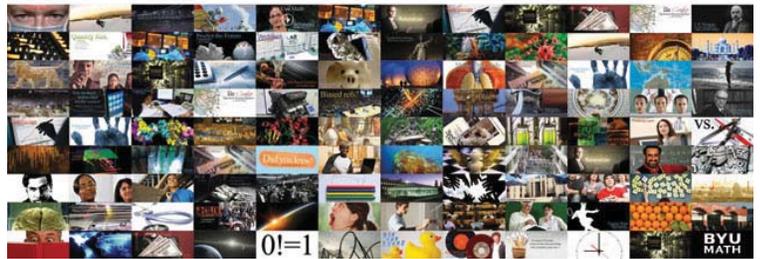
If you have questions, please ask the instructor. The information you get from classmates may be mathematically wrong! And if it isn't related to math info for this class, save it for outside the classroom.

Read the math textbook and study guide:

Yes, there's a reason why we give you a textbook and charge you all that money if you lose it. If you look carefully, you will see that your book contains pages with great examples, explanations and definitions of terms. Take advantage of them.



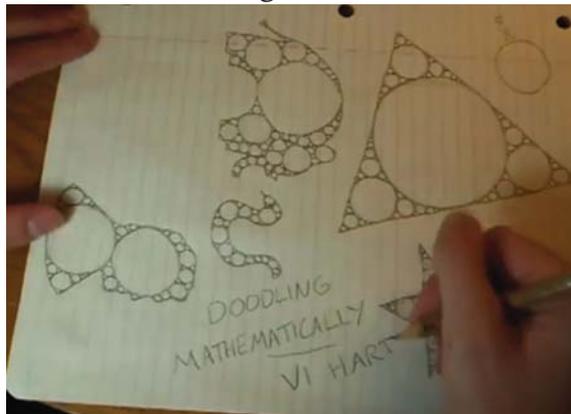
WeUseMath.org



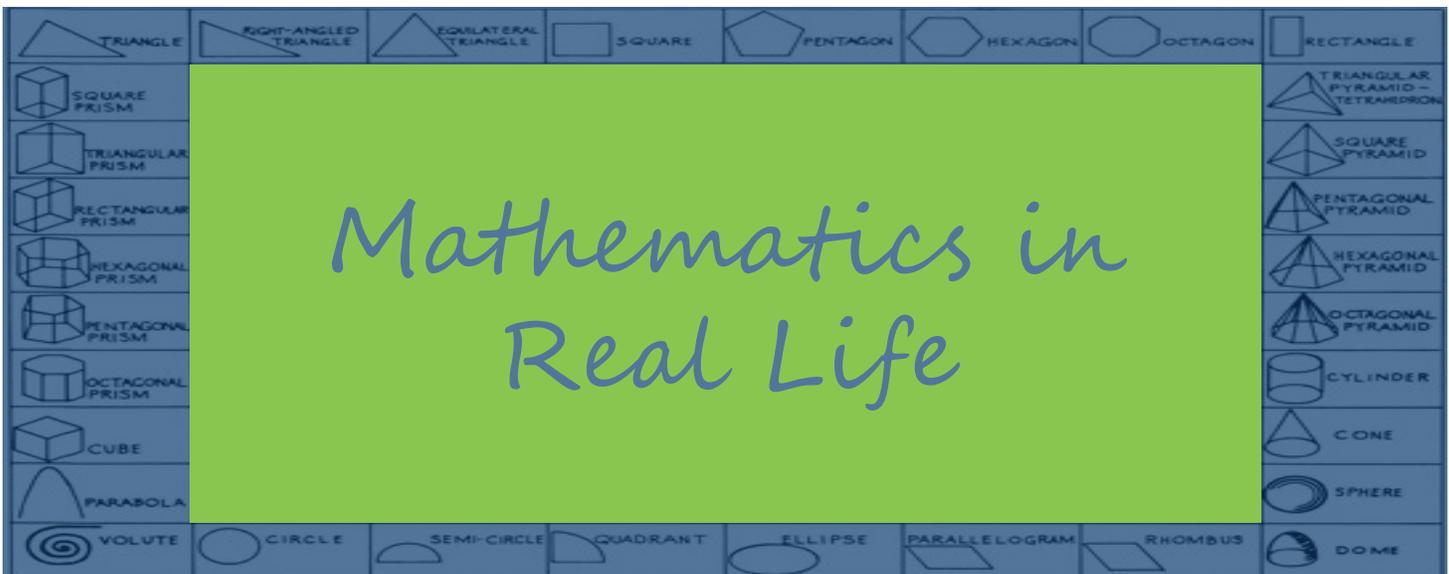
The top 15 highest-earning college degrees all have one thing in common -- math skills. The top 3 jobs are: 1. Mathematician, 2. Actuary, and 3. Statistician. Visit WeUseMath.org for more information on careers and how to succeed in math.

ViHart.com

Check out her blog and videos on Mathematical



Doodling -- who knew trees, stars, snakes, elephants, being sick, and drawing had math in them?

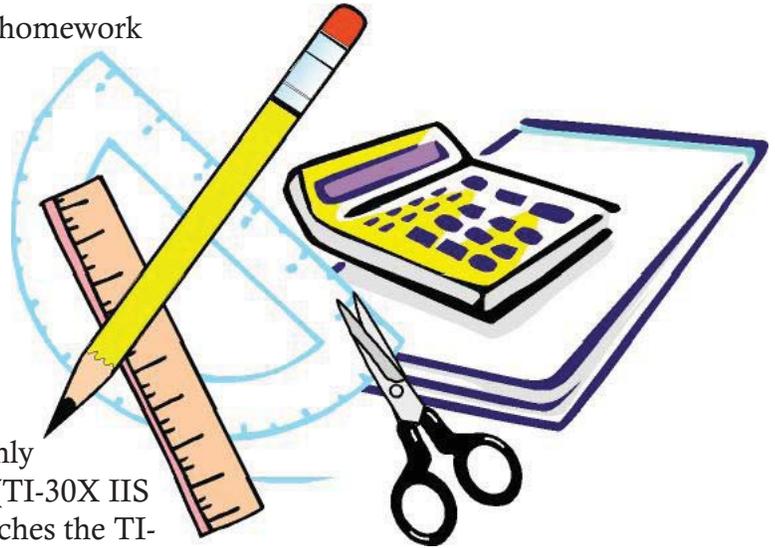


Parents can teach good study habits:

- Provide an appropriate time and place for homework
- Encourage study groups
- Help your child organize and plan
- Allow your child to make mistakes

Parents can provide school supplies:

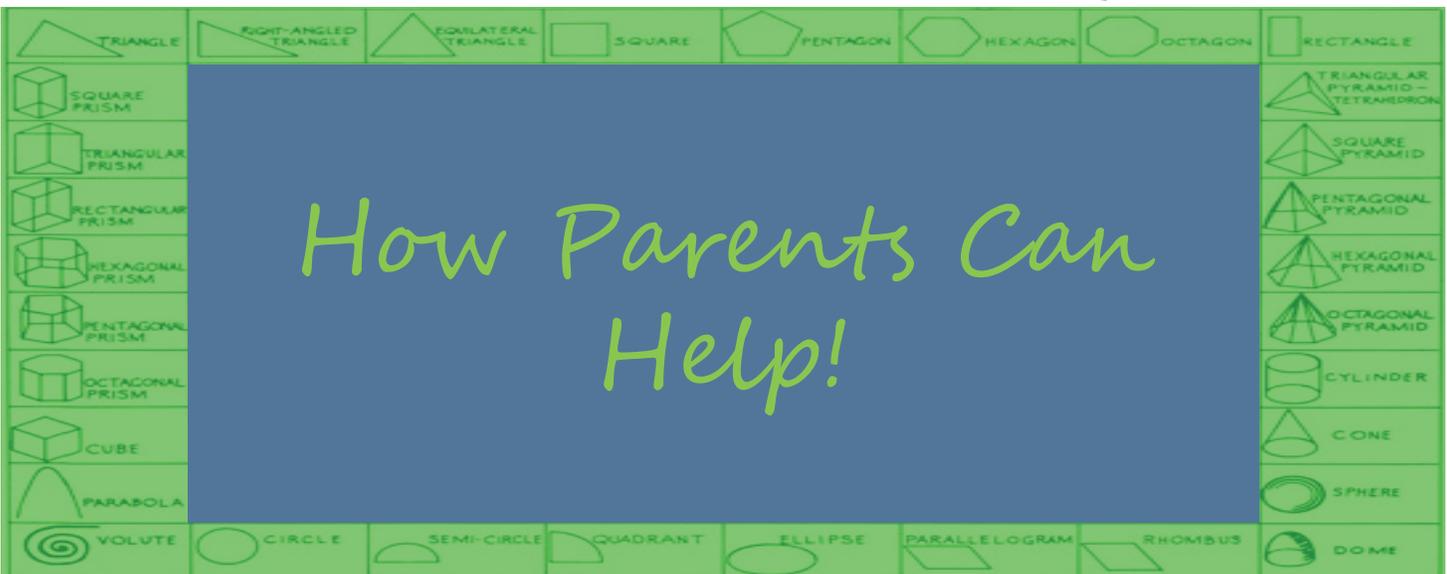
- Pencils with erasers
- Paper (notebook paper and graph paper are recommended)
- Red Grading Pens
- Binder or spiral notebook
- TI-83+ or TI-84 Graphing Calculator (highly recommended), or a Scientific Calculator (TI-30X IIS is recommended because its keyboard matches the TI-83+ and it only costs around \$15)

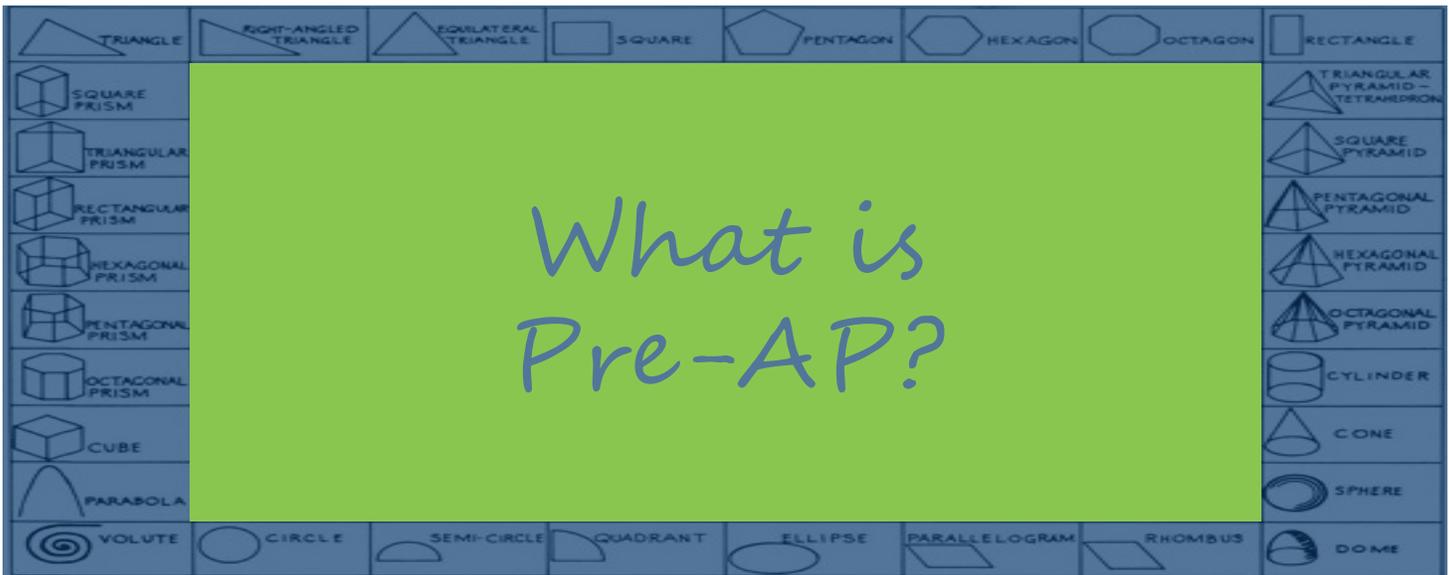


Parents can help their children practice math with free online resources:

- [The textbook's website](#) : Ask your child's teacher for the log-in information. These websites often contain the entire textbook online, additional practice questions, and video tutorials.
- [AchieveFortBendCounty.org](#) : Live tutoring help is available 3 pm -11 pm daily on the world's #1 online tutoring company for homework help, exam review and standardized test preparation.
- [PurpleMath.com](#) and [Math.com](#) and [CoolMath.com](#) : All three are great review websites!
- [USATestPrep.com](#) : Hightower High School paid for access to the TAKS and EOC review materials, quizzes, and games on this website. Ask your child's teacher for the log-in information.
- [KhanAcademy.org](#) : This is an amazing free website with thousands of video lessons on a variety of topics within mathematics, science, humanities, and more. There is also a practice section of the website that allows students to practice math topics from addition to calculus! This would be a great way to review and learn math skills during summer vacation.

Finally, keep in touch with your child's teacher! fortbendisd.com/campuses/hhs/faculty.cfm





What makes this course “Pre-AP”? It...

- Prepares students for the challenges offered by the Advanced Placement Program.
- Introduces skills, concepts, and assessment methods that prepare students for success in AP and other challenging courses.
- Helps students to develop and appreciate mathematics as a coherent body of knowledge and as a human accomplishment.
- Allows students to develop the work ethic and habits of mind that are necessary for success in AP and other challenging math programs.

How do we achieve this?

We use problems, activities and assessments that:

- Might be completely different from problems that the teacher has demonstrated in class, though based on the same concept.
- Require students to develop their reading and interpretation skills.
- Go beyond a minimalist approach to TEKS.
- Are beyond simple drill and recall: greater emphasis on analysis, application, and synthesis of material.
- Require students to engage in an extended chain of reasoning.
- Stretch students in ways that might make them uncomfortable.



What does that mean for students?

- This is a **rigorous class**
- Homework is assigned every class. It is not simply “practice” - but often contains extension material. It is recommended doing homework the night it is assigned, not due.
- Work must be shown for full credit.
- There are not “Review” Days before tests.
- Keeping on top of material is a must! (*and “keeping” material is a must – spiral or binder*)
- Study Groups of Peers is recommended... and necessary for success!

Why is Pre-AP worth the time investment?

Colleges’ view of AP: *Students who successfully complete AP courses are...*

- Better prepared academically
- More likely to choose challenging majors and complete more college level work
 - More likely to exercise leadership
 - More likely to graduate with a double major
 - Twice as likely to go into advanced study

Taken from the *Lighthouse Initiative for Texas Mathematics Classrooms* and the *Teachers Guide to AP Calculus*, and the *Pre-AP Brochure* from the College Board.

This is a rigorous course... but well-worth the time investment!