

Math in Middle/High School

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**Never tell your child that
you are bad at math...**

Grade 6

(1) **ratio and rate** to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of **division of fractions** and extending the notion of number to the system of rational numbers, which includes **negative numbers**; (3) writing, interpreting, and using **expressions and equations**; (4) deepening understanding of **area**, surface area and **volume**; and (5) developing understanding of simple **probabilities** and **statistical** thinking.

Grade 7

(1) developing understanding of and applying **proportional relationships**; (2) developing understanding of **operations with rational numbers** and working with expressions and **linear equations**; and (3) drawing **inferences** about populations based on samples.

Grade 8

(1) formulating and reasoning about expressions and equations and **solving linear equations and systems** of linear equations; (2) grasping the concept of a **function** and using functions to describe quantitative relationships; (3) analyzing **two- and three-dimensional** space and figures using distance, angle, **similarity**, and congruence, and understanding and applying the **Pythagorean Theorem**.

Math Courses - Regents

Algebra I	
Geometry	Geometry Honors
Algebra II	Algebra II Honors

Advanced Math Coursework

Statistics	College Mathematics	College Mathematics (STEM Majors)
Statistics & Probability (Spring/Fall ½ year)	College Algebra*	Precalculus Honors (½ year) & SUPA Calculus I (½ year)*
	College Precalculus*	
AP Statistics	College Calculus* or AP Calculus AB	SUPA Calculus II (Summer)* AP Calculus BC
		SUPA Calculus III (½ year)* & SUPA Ordinary Diff. Equations (½ year)*

**Dual Enrollment courses through WCC/SUNY or Syracuse University*

Computer Science Program

Computing		Computer Science ^{**}
<p>Digital Literacy (½ year) Computer Applications (1 year) Social Media Marketing (½ year) Website Design for Beginners (½ year)</p> <p>IT Essentials (1 year)* Student Help Desk (1 year)</p>	<p>AP Computer Science Principles (1 year)</p>	<p>Introduction to Programming (Spring/Fall ½ year)</p> <p>AP Computer Science A (1 year)</p>

*Expected dual enrollment by 2019-20 school year

**We are planning an expansion of our computer science elective offerings

Extracurriculars



Robotics
Coding Club
Science Olympiad Team
Mathletes Team
Science Honor Society
Math Honor Society



How to support your student...

Always have notes from class

Ensure the student takes responsibility for her own learning

Never give children the answers to problems!

Encourage your child to underline or highlight

Realize that your child may struggle

If your child is frustrated by mathematics, show them how to focus

Focus on the Why?

What is the goal of the problem?

Why does that step work?

Why would we want to do that next?

What does this step in the process accomplish?

How do I know if my answer is reasonable?

Can I check my work to make sure it makes sense to me?

What is important?

What is the goal of the problem?

What did these problems have in common?

Where would I use this in “real life”?

Why do you think your teacher gave you this assignment? What did he or she want you to learn?

How is this assignment related to the homework you had yesterday? In what ways is it similar or different?

Now that you can solve these problems, what do you think you might be able to do next?

Never Give Up...

The most important thing to convey to your children is not to give up.

Mathematical concepts are intricate and take time to fully grasp.

Encouragement and patience go a long way.