

## PARENT GUIDE FOR GRADES 9–12 MATHEMATICS

### Preparing Florida’s Children for a Successful Future



All Florida students deserve to graduate high school with the knowledge and skills they need to succeed in college, careers and life. Over the last several years, Florida has made strong academic gains. But, we know today’s workforce requires our graduates to have stronger critical thinking, problem solving and communications skills than ever before. Higher standards that challenge and motivate our students are essential.

To address this need, education leaders across the state of Florida improved our academic content standards, creating new expectations for what students need to know and be able to do. The Florida Standards are designed to ensure that **ALL** students reach their greatest potential—whatever their path may be.

Preparing your child for success begins in kindergarten and continues as your child moves up through each grade. This guide will support parents and families with children in **grades 9–12** by helping you:

- **Learn** about the Florida Standards and why they matter for your child.
- **Talk** with your child’s teachers about what he/she will be learning in the classroom.
- **Support** your child’s learning in practical ways at home.

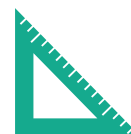
### LEARN ABOUT THE STANDARDS

Florida students will continue to practice many of the same things you learned in grades 9–12—along with some important additional skills. **Grades 9–12** students are learning these types of lessons:

- Rewriting expressions involving radicals and rational exponents using properties of exponents.
- Explaining why the sum or product of two rational numbers is rational; that the sum of a rational number and an irrational number is irrational; and that the product of a nonzero rational number and an irrational number is irrational.
- Defining appropriate quantities for the purpose of descriptive modeling.
- Finding the conjugate of a complex number; and using conjugates to find moduli and quotients of complex numbers.
- Understanding that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.

$$x^{\frac{2}{3}} \sqrt{y} y^{\frac{1}{2}}$$

Every child develops at his/her own pace. The activities in this guide are recommended age-specific guidelines for growing young minds.



Download the complete Mathematics Florida Standards for Grades 9–12 at [www.flstandards.org](http://www.flstandards.org)

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## TALK WITH YOUR CHILD'S TEACHER



When you talk to your child's teacher, don't worry about covering everything. Instead, keep the conversation focused on the most important topics for your child. In grades 9–12, you may ask your child's teacher questions such as:

- How is the course grade determined? Is there anything in addition to learning and mastery of standards included in the calculation?
- Is homework given? How often? What is the typical purpose? How are the results used? Do homework activities impact my student's grade?
- How is your child doing regarding completion of high school graduation requirements?

## SUPPORT LEARNING AT HOME

As a parent, you are your child's first teacher. You can encourage learning mathematics at home in ways that are fun for you and your child. Try these ideas after school, on weekends and during the summer:



Encourage your child to schedule a mathematics course each year, even if he/she finishes the requirements before graduation. Suggest challenging electives such as Trigonometry, Analytical Geometry and Calculus.



Be sure your child takes part in Science Fairs or other opportunities to develop a "modeling" skill set.



Be sure your child has all the mathematics tools necessary for success such as a graphing calculator, protractor and computer access.



Have your child planning for the purchase of a car with insurance and future gas payments.



Open a savings account for your child.



Shore up your own understanding of mathematics and communicate positive thinking to your student. Ask your public librarian to recommend books, documentaries and feature films that illuminate the mystery, beauty and practicality of mathematics.



Prepare your teen for financial independence by applying math skills along with economic principals to managing money. Calculate interest paid on checking/savings accounts or credit cards. Comparison shop for the most cost-effective college program.

Talk to your child's teacher or principal to learn more great ideas to support learning at home.

**Download the complete Mathematics Florida Standards and other resources for parents at [www.flstandards.org](http://www.flstandards.org)**

Questions? Contact [JustforParents@fldoe.org](mailto:JustforParents@fldoe.org)