# PARENT GUIDE FOR GRADE 8 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 **eighth grade** 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 eighth grade—along with some important additional skills. **Eighth grade** students are learning these types of lessons:

- Knowing that numbers that are not rational are called irrational.
   Understanding informally that every number has a decimal expansion.
   For rational numbers, show that the decimal expansion repeats eventually.
- Using numbers expressed in the form of a single digit times an integer power of 10
  to estimate very large or very small quantities, and to express how many times as
  much one is than the other.
- Graphing proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways.

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



• Understanding a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and corresponding output.



Download the complete Mathematics Florida Standards for Grade 8 at 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 eighth grade, you may ask your child's teacher questions such as:

- How will my child be expected to show his/her work?
- What are some areas where my child is excelling? Where does my child need extra help?

If you are concerned that your child is struggling with math, don't postpone talking with his or her teacher. Open the conversation by asking if the teacher has observed any signs of confusion or frustration. Ask if your child has mastered addition, subtraction, multiplication and division of decimals and is competent dividing fractions by fractions.

Help your child engage in "productive struggle," or, in other words, keep going if a math task seems to take too long or be too hard. Encourage honest effort, praise him/her for persevering and share in the satisfaction of eventual success.

### SUPPORT LEARNING AT HOME

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:



Visit "101 questions" (www.101qs.com), a site that features photographs and videos that stimulate creative thinking and math problem solving. Talk with your student about the images.



Using newspapers, magazines and the internet, find tables and infographics that depict salaries of possible careers for your student. Have him/her compare the data and draw conclusions.



Have your child pretend he or she has \$5,000 to invest in the stock market. Help him/her pick several companies to invest the imaginary money in. Then have your child follow the stocks in the newspapers or online each day for a month and use math skills to calculate losses and gains to determine the final value of the original investment.



If you download apps for your child to play, be careful to choose only those with actual educational value, such as Common Sense Media (www.commonsensemedia.org).



Make holiday cards that are examples of rotations, reflections and translations.



Add a graphing calculator to your child's study tools.

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

Questions? Contact JustforParents@fldoe.org



