

## 8th Grade

## Parent Support Guide



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The *Make Mathematics Count, Georgia!* outreach campaign is an exciting project from the Georgia Department of Education to support parents with understanding the expectations of teaching and learning in mathematics. This project includes parent videos and support guides to educate and empower parents in the state of Georgia as they support the implementation of the Georgia's K-12 Mathematics Standards. The videos explain the expectation for mathematics learning through the lens of evidence-based practices and standards-based pedagogy. Mathematics educators and parents worked collaboratively to develop the videos and parent support guides provided for each grade level.



## 8TH GRADE MATHEMATICS CONCEPTS

- Develop an understanding of geometry standards related to transformations.
   They will understand congruence and similarity and learn to use informal arguments to establish proof of angle relationships related to parallel lines and two dimensional polygons.
- Begin to explore the properties of exponents and use these properties to add, subtract, multiply, and divide polynomials.
- Extend work with irrational numbers by applying the Pythagorean Theorem to situations involving right triangles, including finding distance. Eight graders will also begin to explore real-world problems involving volume of cylinders, cones, and spheres.
- Develop and understanding of functions using a variety of representations, including algebraically, graphically, numerically in tables, and verbally.
- Build on the concept of functions, focusing on linear functions.
- Extend the study of linear relationships by exploring models and tables.
- Broaden the study of linear equations to situations involving systems of equations. Eighth graders will learn to solve systems of equations using graphing, substitution, and elimination.

## **HELPFUL RESOURCES FOR 8TH GRADE PARENTS**

- Illustrative Mathematics Open Up Resources Family Materials Use this resource to discover the big ideas about concepts taught in the 8th grade. Each concept has a sample task that you can try with your child as well as solutions to check your child's work.
- <u>Talking Math With Your Kids</u> Use this resource to promote rich mathematical conversations with your child. This website collects research about, and examples of, math talk with children. Each post offers suggestions for adapting the examples for your own children, interests, and lives.

 Youcubed Parent Resources - Use this resource as a guide that you can take as parents to increase your child's math achievement and make math fun!

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MOVING PARENTS FROM CONSUMERS
IN EDUCATION TO PARTNERS IN
EDUCATION

