

Understanding Big Ideas Math

A Parent Guide for Grades 5–8

WHAT IS BIG IDEAS MATH?

Big Ideas Math is a research-based math curriculum (written by Ron Larson and Laurie Boswell) used in many U.S. schools for grades K–12. In grades 5–8, it builds skills step by step — moving students from upper-elementary number sense toward middle-school and Algebra 1 readiness. Lessons emphasize problem-solving, real-world application, and "productive struggle," where students explore a concept before being shown the shortcut.

COURSE PROGRESSION, GRADES 5–8

Grade 5 <i>Foundations</i>	Grade 6 <i>Course 1</i>	Grade 7 <i>Course 2</i>	Grade 8 <i>Course 3 or Algebra 1</i>
Fractions, decimals, volume, and the coordinate plane	Ratios, rates, integers, and intro to expressions/equations	Proportions, percents, and beginning algebraic reasoning	Linear equations, functions, systems, and exponents

THE PATH INTO ALGEBRA

Many districts offer an accelerated pathway. Students who move quickly through Course 1–2 concepts may compact two years into one, allowing them to take Algebra 1 in 8th grade instead of 9th. Algebra 1 topics include:

- Solving and graphing linear equations & inequalities
- Writing and interpreting functions
- Systems of linear equations
- Exponents, polynomials, and factoring basics

Ask your child's teacher or counselor which pathway (regular, compacted, or accelerated) your student is on.

HOW YOU CAN SUPPORT LEARNING AT HOME

- Ask your child to explain their thinking, not just the final answer — that's how the program is taught in class.
- Use the online student edition (assigned by your teacher) for extra practice and worked examples.
- Expect some productive struggle — wrestling with a problem before getting help is part of the design.
- Review vocabulary together; math language (e.g., "coefficient," "proportional") is taught explicitly and builds each year.

Questions? Reach out to your child's math teacher anytime — we're happy to talk through the curriculum, pacing, or your child's progress.