



Avon Grove Charter School
Mathematics Curriculum Alignment
Grade Level: Eighth

AGCS uses Math in Focus as its primary elementary mathematics program. The purpose of this document is to provide an overview of the major concepts/skills at this grade level. Parents are the target audience of this resource, however students may also find it helpful as a skills checklist.

NUMBERS AND OPERATIONS

A student will be able to...

- Distinguish between rational and irrational numbers using their properties.
- Estimate irrational numbers by comparing them to rational numbers.

Course 3A: Chapter 1,

ALGEBRAIC CONCEPTS

A student will be able to...

- Apply concepts of radicals and integer exponents to generate equivalent expressions.
- Understand the connections between proportional relationships, lines, and linear equations.
- Analyze and solve linear equations and pairs of simultaneous linear equations.
- Define, evaluate, and compare functions.
- Use concepts of functions to model relationships between quantities.

Course 3A: Chapter 2,4, 5, 6

Course 3B: Chapter 10

GEOMETRY

A student will be able to...

- Apply concepts of volume of cylinders, cones, and spheres to solve real-world problems.
- Understand and apply congruence, similarity, and geometric transformations using various tools.
- Understand and apply the Pythagorean Theorem to solve problems.

Course 3B: Chapter 7, 8, 10, 11

MEASUREMENT, DATA, AND PROBABILITY

A student will be able to...

- Analyze and/or interpret bivariate data displayed in multiple representations.
- Understand that patterns of association can be seen in bivariate data utilizing frequencies.

Course 3B: Chapter 11