

**Midwest Region PASS Dissemination Center
Middle School
Course Descriptions**

MATH 8 B

SCOPE OF COURSE

Math 8 is divided into two parts, Math 8 A and Math 8 B (still in development). Both parts are each divided into 5 units with 14 lessons per unit, each unit teaches concepts and strategies that are recommended for 8th grade students in the mathematical standards from many states. A description of each of the five units in Math 8 B is below.

SQUENCE OF SKILLS

Unit 1 – Angles and Polygons

Plane Geometry is studied and explored in this unit. Algebra is also used in conjunction with Geometry to solve problems.

Unit 2 – Coordinate Geometry, Circles, and Graph Theory

The Coordinate plane is used to calculate measurements and solve applications involving coordinate geometry. Circles, locus of points, and graph theory are also explored.

Unit 3 – Transformational Geometry

This unit focuses on transformations on the coordinate plane. Translations, reflections, rotations, and dilations will be explored. Congruent and similar figures are studied, as well as constructions.

Unit 4 – Measurement

Measurements involving both two- and three-dimensional figures are calculated, including perimeter, area, volume, and surface area. Conversions are also studied in this unit.

Unit 5 – Logic

A variety of logic statements are studied and analyzed, including compound statements, conditional statements, and biconditional statements. Deduction and induction are used to solve puzzles.