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Introduction

Math Mammoth Geometry 2 continues the study of geometry after *Math Mammoth Geometry 1*, and is suitable for grades 6-7.

The main topics in the book include

- angle relationships
- classifying triangles and quadrilaterals
- angle sum of triangles and quadrilaterals
- congruent transformations, including some in the coordinate grid
- similar figures, including using ratios and proportions
- review of the area of all common polygons
- circumference of a circle (π)
- area of a circle
- conversions between units of area (both metric and customary)
- volume and surface area of common solids
- conversions between units of volume (both metric and customary)
- some common constructions.

This is a lot of topics, and includes most geometry topics taught commonly in middle school, though not all. For example, Pythagorean Theorem is not covered, nor is the area of a sector of a circle. Some topics are not covered to the same depth as in 8th grade (for example congruent transformations or angle relationships). After this book, most students should be fine studying the geometry sections included in pre-algebra books.

I have striven to make connections between geometry and other areas of mathematics, such as using proportions and ratios with similar figures, including problems that involve use of percent, coordinate grid, and even equations. Student will also use calculator in some problems (those are marked with a small calculator symbol).

There are still lots of drawing problems, though calculations are becoming more important than in *Math Mammoth Geometry 1*. I hope the book can fit your needs.

I wish you success in your math teaching!
Maria Miller, the author