
Math Mammoth Geometry 1


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Introduction

Math Mammoth Geometry 1 covers all the typical geometry topics for grades 4-5: angles, triangles, quadrilaterals, other polygons, area, perimeter and volume.

The problems in this book involve lots of drawing. Geometry is a hands-on subject, and many children like that. Moreover, drawing is an excellent means of achieving the conceptual understanding that

geometry requires. Exercises marked with the symbol “” are meant to be done in the student’s notebook or on blank paper.

The study of geometry is also full of new vocabulary. I encourage the usage of a *geometry notebook*, where students will write every new concept or term, and draw a picture or pictures and text to explain the term. That will help them to remember the terms better, and most children will like creating a book of their own. The students can also do the drawing exercises in this book.

The lessons in the book

First we review the area and perimeter of rectangles (as taught in third grade). Then the students are introduced to **angles**, and learn about acute, right, obtuse, and straight angles. Students learn how to measure angles with a protractor, draw angles, and estimate some common angles.

After angles, we study **parallelograms** and different **kinds of triangles** (acute, obtuse, right). We also review polygons and then go on to a lesson about **circles**. Students learn the terms circle, radius, and diameter, and learn to draw circles and circle designs using a compass.

Then we go on to **classify quadrilaterals and triangles**. There are seven types of quadrilaterals to learn about, and now students classify triangles both by sides and by angles.

The last section of the book deals with area and perimeter of rectangular shapes, and **volume** of rectangular prisms. I have also included a lesson for problem solving, and two review lessons.

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