
Math Mammoth Decimals 2

Contents

	page
Introduction	5
Review: Tenths and Hundredths.....	7
More Decimals: Thousandths	10
Decimals on a Number Line	15
Add and Subtract Decimals—Mental Math	17
Add and Subtract Decimals in Columns	21
Comparing Decimals	23
Rounding Decimals	25
Multiply a Decimal by a Whole Number	27
More on Multiplying Decimals	31
Multiplying Decimals by Decimals	28
More Practice and Review	33
Divide Decimals by Whole Numbers 1	35
Divide Decimals by Whole Numbers 2	39
Review 1	41
Multiply Decimals by Decimals	44
Multiplication as Scaling	48
Decimal Multiplication—More Practice	52
Dividing Decimals—Mental Math	54
More Division with Decimals	57
Multiply and Divide by Powers of Ten 1	60
Multiply and Divide by Powers of Ten 2	64
The Metric System, Part 1	67
The Metric System, Part 2	71
Divide Decimals by Decimals 1	74
Divide Decimals by Decimals 2	77
Converting Between Customary Units of Measurement	82
Rounding Measurements	86
Problem Solving	88
Review 2	92
Answers	97
More from Math Mammoth	125

Introduction

Math Mammoth Decimals 2 is a book about decimal place value and the four operations with decimals. It is most suitable for fifth and sixth grade.

The book starts with a short review of previously learned concepts (from *Math Mammoth Decimals 1*): place value with tenths and hundredths, and adding and subtracting decimals that have tenths and hundredths.

The rest of the book is spent learning the four operations of decimals with numbers that have up to three decimal digits, and especially concentrating on decimal multiplication and division. We start by learning place value, comparing, and rounding decimals (tenths, hundredths, and thousandths). After that follow addition and subtraction, and then various multiplication and division topics.

I have tried to emphasize mental calculations based on conceptual understanding of decimals. The text often includes little tips or “tricks” that help with mental calculations. Along with all that, the book has lessons on long multiplication and long division with decimals. Problems that show a little calculator picture are meant to be solved with the help of a calculator. Otherwise, the use of a calculator should not be allowed in solving the problems.



The last lessons deal with converting between customary units of measurement, and problem solving. They are included here since the problems involve the usage of decimal numbers, and also because the material for this book is taken from the recently updated fourth and sixth chapters of the *Math Mammoth Grade 5-A and 5-B Complete Worktexts*, which includes those problem solving lessons.

After this book, the student should understand how to perform all of the four operations with decimals. However, please note that this book does not practice these operations with decimals that have more than 3 decimal digits. Students in sixth grade or higher should also practice solving problems with decimals with much longer decimals. For fifth grade, I feel this book covers the topic sufficiently.

You can make additional supporting worksheets on this page:

https://www.homeschoolmath.net/worksheets/grade_5.php

Scroll down to the “Decimals” section.

I wish you success in teaching math!

Maria Miller, the author

Sample worksheet from
<https://www.mathmammoth.com>