
Math Mammoth Decimals 2

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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, number rule puzzles 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 fourth chapter of the *Math Mammoth Grade 5-A Complete Worktext*, 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:

www.homeschoolmath.net/worksheets/grade_5.php

Scroll down to the “Decimals” section.

I wish you success in your math teaching!

Maria Miller, the author

Helpful Resources on the Internet

Use these free online resources to supplement the “bookwork” as you see fit.

Decimal arithmetic

My videos that go through all of the important decimal arithmetic: adding, subtracting, multiplying, dividing, comparing and rounding decimals, plus some problem solving. Great for grades 5, 6, and 7.

<http://www.youtube.com/user/MathMammoth#grid/user/CCFD68119A0DA3E8>

Place Value Strategy

Place 3 or 4 digits given by the spinner to make the greatest number possible.

www.decimalsquares.com/dsGames/games/placevalue.html

Decimal Darts

Try to pop the balloons with darts by estimating at which height the balloons are.

www.decimalsquares.com/dsGames/games/darts.html

Estimate

Estimate to which decimal the arrow is pointing on the number line. The game has the words “Evaluation version” across the screen, but is still playable.

www.interactiveresources.co.uk/mathspack1/estimate/estimate.html

Decimal Challenge

Guess the decimal number between 0 and 10. Each time feedback tells whether your guess was too high or too low.

www.interactivestuff.org/sums4fun/decchall.html

Beat the Clock

Type in a decimal shaded in the square in this timed game.

www.decimalsquares.com/dsGames/games/beatclock.html

Scales

Move the pointer to match the decimal number given to you. Refresh the page from your browser to get another problem to solve.

www.interactivestuff.org/sums4fun/scales.html

Switch

Put the sequence of decimal numbers into ascending order by switching them around. Refresh the page from your browser to get another problem to solve.

www.interactivestuff.org/sums4fun/switch.html

Smaller and Smaller Maze

Practice ordering decimal numbers and find your way through the maze.

<http://www.counton.org/magnet/kaleidoscope/smaller/index.html>

Decimal and Whole Number Jeopardy

Review place value and comparing and rounding numbers. Also, practice number patterns.

www.quia.com/cb/8142.html

Decimals in Space

An asteroids style game where you first answer a question about the smallest decimal, then get to shoot asteroids, earning points based on the numbers on them.

themathgames.com/arithmetic-games/place-value/decimal-place-value-math-game.php

Sock

Push the green blocks into the holes to make the target number.

www.interactivestuff.org/sums4fun/sock.html

Decimal Squares BlackJack

Take cards with decimals, trying to get as close to 2 as possible, but not go over.

www.decimalsquares.com/dsGames/games/blackjack.html

A Decimal Puzzle

Make every circle add up to 3.

nlvm.usu.edu/en/nav/frames_asid_187_g_2_t_1.htmlsopen=instructions&from=category_g_2_t_1.ht

FunBrain Decimal Power Football

Simple games for addition, subtraction, multiplication, and division of decimals, including missing factor/divisor types. Solve a problem, and the football player moves on the field.

<http://www.funbrain.com/cgi-bin/getskill.cgi?A1=choices&A2=fb&A3=6&A4=0&A7=0>

Exploring Division of Decimals

Use a decimal square to explore the products of two numbers with one decimal digit. The product is shown as an area.

www.hbschool.com/activity/elab2004/gr6/1.html

Decimal Speedway

Practice decimal multiplication in this fun car racing game.

www.decimalsquares.com/dsGames/games/speedway.html

Free worksheets for order of operations

Generate printable & customizable worksheets for order of operations. Choose from five operations and parentheses. You can choose the number range used, number of problems, and more.

http://www.homeschoolmath.net/worksheets/order_of_operations.php

My Dear Aunt Sally

A fun game you can play online for free, or purchase as an app. Choose whole numbers, integers, fractions, decimals, or rational numbers, and then which of the five operations to use. In the game, you need to place the given numbers into two expressions so that the operations make the two expressions have the same value.

<http://www.mydearauntsally.com>