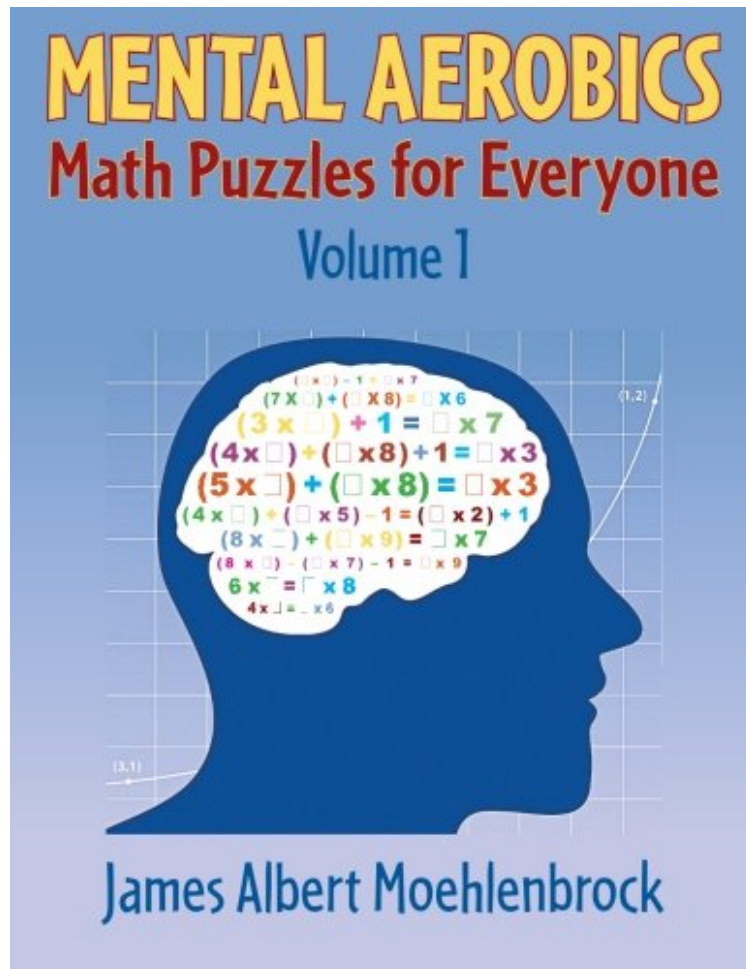


Mental Aerobics -- Math Puzzles for Everyone (Volume 1)

James Albert Moehlenbrock

DOC | *audiobook | ebooks | Download PDF | ePub



#10714731 in Books CreateSpace Independent Publishing Platform 2012-09-06 Original language: English PDF # 1 11.00 x .33 x 8.50l, .78 #File Name: 147922457X144 pages | File size: 47.Mb

James Albert Moehlenbrock : Mental Aerobics -- Math Puzzles for Everyone (Volume 1) before purchasing it in order to gauge whether or not it would be worth my time, and all praised Mental Aerobics -- Math Puzzles for Everyone (Volume 1):

0 of 0 people found the following review helpful. A New Kind of Math Puzzle By Jeff Weston I will mention at the outset that I am a friend of the author and that we are both involved with math education. This book is an unusual collection of the author's own math puzzles. One can compare it to a collection of Sudoku or crossword puzzles, except that people already know how to do those. Pages 9 and 10 in the book describe how to do the puzzles, but these did not consistently appear for me in the preview. I will outline the solution process. A single digit 1 through 9 goes in each box. Zero is not allowed as an entry. One enters a value in a box and then tries different values in the other boxes to form an equality. The one digit numbers for each box are combined to form a solution, a number with digits equal to the number of boxes. Puzzles can have more than one solution. The solutions are often related to each other by

patterns. Consider Example Two on page 10. Using 5, 5, and 7 in the 3 boxes gives $5 \times 5 + 5 \times 6 + 1 = 7 \times 8$. The solutions of Example Two (in increasing order) are therefore 133, 176, 345, 388, 514, 557, 726, 769, 938. An interesting property of these solutions is that they differ by a couple of constants. 176 minus 133 gives 43; 388 minus 345 gives 43. Similarly, 345 minus 176 gives 169; 557 minus 388 gives 169. Most of the solutions in this example differ by 43 or 169. This constant difference can be useful for predicting new solutions when two solutions have been found. It is remarkable that the author determined ALL the solutions to these puzzles without using a calculator. It would be easy to miss a solution. On the various examples checked with an Excel spreadsheet, I have found no mistakes. Try working a couple puzzles in the preview. I personally enjoy the one with six or more solutions, so I can use the method described in the previous paragraph.

Why Should You Buy This Book? If you are the parent of an elementary school student, this book will help your child master the multiplication tables giving him or her the foundation needed for grasping new math concepts with speed, accuracy, and confidence. If you are a high school student, this book will sharpen your thinking speed while giving you practice at developing a logical plan for solving each puzzle, especially the more advanced ones. If you are a senior citizen, solving these simple to complex puzzles may help you ward off Alzheimer's. Also, you'll discover that you and your grandchildren can solve these puzzles together or in competition with one another. This book can serve as a tool for connecting loved ones in a family-fun activity. If you are a teacher these puzzles can challenge your students' minds before the day's lesson or while you are fulfilling last minute office requests. For everyone, these puzzles are just plain fun! Every individual puzzle is based on the multiplication tables (or multiplication facts, as they are sometimes called) from one through nine. Therefore, the puzzles are actually suitable for anyone from the third grader, to whom the tables are generally introduced, through adulthood. If you can't recall all the multiplication facts, there is a simple exercise in the Help Section toward the back of the book that can help make you an expert very quickly. Also, there are four timed tests in the back that can tell you how proficient you already are. The two examples on pages 9 and 10 will explain how to begin. You may soon discover that these puzzles can be addictive. An increased liking for math will become evident, too. Enjoy the challenges ahead of you as well as the benefits.