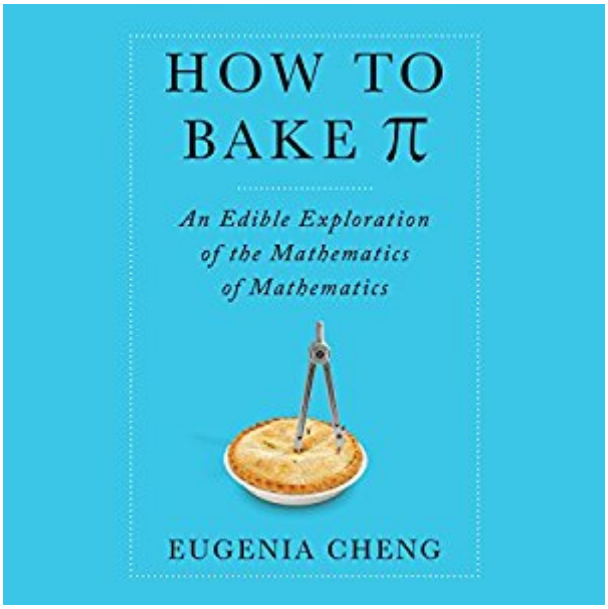
How To Bake Pi: An Edible Exploration Of The Mathematics Of Mathematics



Synopsis

What is math? And how exactly does it work? In How to Bake Pi, math professor Eugenia Cheng provides an accessible introduction to the logic of mathematics - sprinkled throughout with recipes for everything from crispy duck to cornbread - that illustrates to the general listener the beauty of math. Rather than dwell on the math of our high school classes, with formulas to memorize and confusing symbols to decipher, Cheng takes us into a world of abstract mathematics, showing us how math can be so much more than we ever thought possible. Cheng is an expert on category theory, a cutting-edge subject that is all about figuring out how math works, a kind of mathematics of mathematics. In How to Bake Pi, Cheng starts with the basic question "What is math?" to explain concepts like abstraction, generalization, and idealization. By going back to the logical foundation of the math we all know (and may or may not love), she shows that math is actually designed to make difficult things easier. From there, she introduces us to category theory, explaining how it works to organize and simplify the whole discipline of mathematics. The result is a book that combines some of the most satisfying features of popular math books - the thrill of truly understanding things that may or may not have been confounding in high school - while still looking long and hard into unexplored territory. Through lively writing and easy-to-follow explanations, How to Bake Pi takes even the most hardened math-phobeon a journey to the cutting edge of mathematical research.

Book Information

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Best Sellers Rank: #9 inÂ Books > Science & Math > Mathematics > Pure Mathematics > Group Theory #21 inÂ Books > Audible Audiobooks > Science > Mathematics #41 inÂ Books > Audible Audiobooks > Nonfiction > Lifestyle & Home > Cooking

Customer Reviews

I can’t believe how good this book is for illuminating what mathematics is. I have spent most of the past forty-five years trying to find the words to communicate what Eugenia Cheng has so masterfully

done in this book. Whenever I get a chance in the future to talk about mathematics I will steal her metaphors and examples. I will also be recommending the book to all of my colleagues in education as well as students. I could not stop reading and wondered if she could continue, chapter after chapter, to come up with examples to make her case. She succeeded right up to the end. I am a little sorry now that I did not pursue Category Theory with more diligence when I first encountered it in the 60â ™s, but I may look into it again at this late date.

This is the best book about math that I've ever read. This coming from someone who had loved math from a young age, majored in math, and have taught math for several years. Dr. Cheng deftly and simply talks about what math *is* (and what it is not). This is one of the biggest problems I face as a teacher. Most people don't know what math is and worse think they know what math is. This is a beautiful defense of the beauty in math while still maintaining a simple approach. I look forward to reading whatever Dr. Cheng writes in the future.

I found this to be a terrific book and I wish I had been exposed to this while a student. It certainly makes mathematics much more comprehensible. On reading this book I've realized that my career in IT has been all about category theory. I would have given this book five stars, except that I recently purchased Cheng's recently released book, Cakes, Custard and Category Theory... which is this book with a different title. And why aren't the two titles cross referenced by using 's Formats and Editions feature? Just because the publishers are different, doesn't excuse this literal duplicity.

This is both an entertaining and interesting book on math. It's mostly well-written in the first person by the author, who uses cooking and recipes as a metaphor for math. The metaphor mostly works, although to get it, you probably need to know the basics of cooking. She also uses some other metaphors even more effectively. It explores math concepts one chapter at time, but the author can't help but introduce some later concepts in her earlier chapters. Her discussion of abstract thinking early in the book is outstanding. I have one quibble, which is that it's not very well edited. There are a couple of grammatical errors and some editing errors that are surprising for a book on math, which generally has a certain precision to it. (But not always, as the author points out.)

I decided to read this book after hearing an interview with the author on NPR. It sounded like a clever idea but didn't fulfill its promise. It's a rather uneven book. Some passages talk down to the reader as if explaining math to a small child, while others use field-specific jargon with no

explanation, and the prose goes back and forth between the two extremes. The hook is to use recipes to explain math, but Cheng doesn't always do that. Every chapter starts with a recipe and then goes on to discuss a topic that may or may not be related to the recipe. It doesn't help that the Kindle edition is missing several diagrams and formulae and sometimes even portions of the text. Cheng's prose is also uneven as it alternates between chatty anecdotes and lecture material. A good copy editor would have done wonders for this book by evening it out and cleaning up the often clunky prose. (When indicates time, and where indicates place, not the other way around.)

This seems like a good book. It might be a very good book. On Kindle it is impossible to know. I guess I have finally learned my lesson. Any book that relies on formulas, charts, diagrams, maps, etc. may or may not be done properly in it's Kindle version. It is pure laziness since some of these types of books are done well. I almost understand when I must use the clunky image expand on Kindle to see an image. I do not understand when the image is left out completely. Are there no proofreaders?I'll seek a refund for Kindle and repurchase a hardcopy version.

Like the author I like both cuisine and Math, so this book is a smooth reading for me into the most advanced & abstract "Mathematics of Mathematics" -- Category Theory (CT).I have attempted few years ago to self-pace study Category Theory from books & YouTube lectures, but never go beyond 3 chapters / videos. You follow the explanations - definitions, theorems, ..., understand them step-by-step, but at the end still ask yourself "What the heck is Category Theory ?"Eugenia Cheng avoids this pitfall by using Baking analogy & other 'outside' examples to give him a 'sense' of dÃ©jÃ -vu with these CT terminologies: Universal Property, Commute, coLimit, Monoid, etc.This is a book for beginner of Category Theory. It is an "apetizer", not a "main dish". I hope she will write the "Volume 2" to get us into the real stuff of CT -- using the same baking or cooking analogy, if possible.

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