

## The book was found

# Count Like An Egyptian: A Hands-on Introduction To Ancient Mathematics





### Synopsis

The mathematics of ancient Egypt was fundamentally different from our math today. Contrary to what people might think, it wasn't a primitive forerunner of modern mathematics. In fact, it  $canAca \neg a_{,,c}$ t be understood using our current computational methods. Count Like an Egyptian provides a fun, hands-on introduction to the intuitive and often-surprising art of ancient Egyptian math. David Reimer guides you step-by-step through addition, subtraction, multiplication, and more. He even shows you how fractions and decimals may have been calculated  $\hat{A}$   $\hat{a} - \hat{a}$   $\hat{c}$  they technically didn $\hat{A}$ ¢ $\hat{a} \neg \hat{a}$ , ¢t exist in the land of the pharaohs. You $\hat{A}$ ¢ $\hat{a} \neg \hat{a}$ , ¢ll be counting like an Egyptian in no time, and along the way you  $\tilde{A}$ ¢ $\hat{a} \neg \hat{a}_{,,}$ ¢ll learn firsthand how mathematics is an expression of the culture that uses it, and why there  $\tilde{A}\phi \hat{a} - \hat{a}_{\mu}\phi s$  more to math than rote memorization and bewildering abstraction. Reimer takes you on a lively and entertaining tour of the ancient Egyptian world, providing rich historical details and amusing anecdotes as he presents a host of mathematical problems drawn from different eras of the Egyptian past. Each of these problems is like a tantalizing puzzle, often with a beautiful and elegant solution. As you solve them, you  $\tilde{A}\phi \hat{a} - \hat{a}_{,,\phi} f$  be immersed in many facets of Egyptian life, from hieroglyphs and pyramid building to agriculture, religion, and even bread baking and beer brewing. Fully illustrated in color throughout, Count Like an Egyptian also teaches you some Babylonian computation  $\tilde{A}\phi \hat{a} \neg \hat{a} \phi$  the precursor to our modern system $\tilde{A}$ ¢ $\hat{a} \neg \hat{a}$ ¢and compares ancient Egyptian mathematics to today $\tilde{A}$ ¢ $\hat{a} \neg \hat{a}$ , ¢s math, letting you decide for yourself which is better.

#### **Book Information**

Hardcover: 256 pages Publisher: Princeton University Press; First Edition edition (2014) Language: English ISBN-10: 0691160120 ISBN-13: 978-0691160122 Product Dimensions: 1 x 9.2 x 10 inches Shipping Weight: 1.8 pounds (View shipping rates and policies) Average Customer Review: 4.6 out of 5 stars 16 customer reviews Best Sellers Rank: #645,829 in Books (See Top 100 in Books) #106 inà Â Books > Science & Math > Mathematics > Popular & Elementary > Counting & Numeration #128 inà Â Books > History > Ancient Civilizations > Assyria, Babylonia & Sumer #131 inà Â Books > History > Ancient Civilizations > Mesopotamia

#### Customer Reviews

"Count Like an Egyptian would make an excellent addition to math classrooms at many different levels. Reimer includes problems in the text and solutions in the back of the book, so the reader can practice techniques and get a feel for exactly how the system works as they go through the book. The mathematics is basic enough to be helpful for children learning fractions or multiplication for the first time, but it's also different enough from the methods most of us know that adults will get a lot out of it as well."--Evelyn Lamb, Scientific American"History lovers will gain much more than just insight into the Egyptian mind-set. The author interleaves mathematical exposition with short essays on Egyptian history, culture, geography, mythology--all, like the rest of the book, beautifully illustrated. ... For a lively and inquiring mind the book has a good deal to offer. It is well written, lavishly illustrated, and just awfully interesting. The book is a pleasure to hold, to browse, and to read."--Alexander Bogomolny, Cut the Knot"You get the feeling that David Reimer must be a pretty entertaining teacher. An associate professor of mathematics at the College of New Jersey, he has taken on the task of explaining ancient math systems by having you use them. And though it's not easy, he manages to lead you, step by step, through a hieroglyphic based calculation of how many 10-pesu loaves of bread you can make from seven hekat of grain."--Nancy Szokan, Washington Post"An interesting combination of history, ancient literature and mythology, arithmetic puzzles and mathematics, and lavishly illustrated with numerous colour diagrams, this engaging book is unusual, thought-provoking and just plain fun to read."--Devorah Bennu, GrrlScientist, The Guardian"Count Like an Egyptian is a beautifully illustrated and well-written book. ... Reimer's overriding goal is to demonstrate that Egyptian fraction arithmetic is fascinating, versatile, and well suited for whatever calls fractions into existence. . . . By working through the material Reimer patiently and gently presents, the reader will have a more thorough understanding and appreciation of how Egyptian scribes made the calculations needed to administer an empire bent on building pyramids and granaries, surveying flooded riverside property, digging irrigation basins, and rationing or exchanging bread and beer supplies amongst its gangs of workers. . . . This book should find a home in libraries used by middle school and high school mathematics teachers. It also provides a good resource for mathematics education professors and their students on the college level as they explore historical beginnings of mathematical ideas, make cultural comparisons, and develop interdisciplinary connections."--Calvin Jongsma, MAA Reviews"An interesting combination of history, ancient literature and mythology, arithmetic puzzles and mathematics, and lavishly illustrated with numerous colour diagrams, this engaging book is unusual, thought-provoking and just plain fun to read."--GrrrlScientist"This amusing popular introduction to an uncommon subject is

a mental adventure that sheds new light on the thought processes of a lost civilization and will appeal both to those who enjoy mathematical puzzles and to Egyptophiles."--Edward K. Werner, Library Journal"In general I really like this book and believe it is, if not necessarily a must for all Egyptophiles, then definitely one to put on the wish list as an interesting addition to your bookshelf. ... It is fun way of working through complicated and yet practical mathematics which makes the Rhind Papyrus come alive and gives an insight into the logical brain of ancient Egyptian scribes."--Charlotte Booth, charlottesegypt.com"Reimer succeeds very well in transferring his enthusiasm tor the Egyptian system to the reader. The reactions from his students who were used tor a try-out are claimed to be positive. But even if you do not want to graduate as an Egyptian scribe, you may be charmed by the witty Egyptian system and you will be delighted by the colourful illustrations and Reimer's entertaining account of it all."--A. Bultheel, European Mathematical Society"Count Like an Egyptian takes the reader step-by-step through the ancient Egyptian methods, which are surprisingly different from our own, and yet, in the capable hands of author David Reimer, surprisingly understandable. This lovely book has fun illustrations to demonstrate the various operations, basic geometry, and other tasks faced by the scribes. . . . This book is a pleasure to read and makes Egyptian math a pleasure to learn."--Gretchen Wagner, San Francisco Book Review"The book is intended to be used as a teaching tool and includes practice examples for the student. It would be difficult to imagine a work that more effectively covers this aspect of the ancient civilization."--JPP, Ancient Egypt"David Reimer succeeds in keeping the mathematics in Count Like an Egyptian clever and light, raising this book into a rare category: a coffee table book that is serious and fun."--Robert Schaefer, New York Journal of Books"This volume is ideal for anyone, and I truly mean anyone, young or old, mathematician, student or teacher, who wants to learn how the ancient Egyptians did mathematics. . . . This book has all the Egyptian mathematics a general mathematician, teacher or student could ever want to learn. In particular it would be a perfect resource for a schoolteacher, elementary through lower division college. The material is presented in a direct and accessible manner."--Amy Shell-Gellasch, CSHPM Bulletin"Overall this is a didactic and well written book, with many important illustrations, with some incursions in the mathematics of other ancient cultures."--European Mathematical Society"With Reimer's guidance, motivating stories, and lighthearted remarks, readers can become facile with Egyptian algorithms and the insights they reveal. . . . Valuable for all readers looking for a guided of an alternative to traditional school arithmetic and the torpor that algorithmic training causes."--Choice"[T]his book is a worthwhile read for anyone interested in seeing exactly how ancient Egyptians dealt with mathematics. It will help put our present algorithms into perspective as simply one of many possible

algorithms one could use to perform arithmetic operations."--Victor J. Katz, Mathematical Reviews Clippings"[Reimer] . . . set himself to understand and explain the ancient methods, and the result is an approachable, thorough and lavishly-produced book."--Owen Toller, Mathematical Gazette"Count like an Egyptian is a beautifully glossy and colourful book; the presentation of hieroglyphs is particularly well done, and fully interated into the surrounding text. ... This book has given me a new perspective on day-to-day arithmetic."--Christopher Hollings, Mathematics Today"This is a wonderful book, very well written, filled with illustrations on every page, witty, addressing anyone interested in grade school arithmetic."--Victor V. Pambuccian, Zentralblatt MATH"Count Like an Egyptian is important for anyone interested in alternative algorithms. . . . If you want to roll up your sleeves and learn some new mathematics, this is the book for you."--Michael Manganello, Mathematics Teacher"An engaging and beautifully illustrated book that deals with the basics of ancient Egyptian mathematics, set in the wider context of other ancient mathematical systems."--Corinna Rossi, Aestimatio"A great approach and a dedicated effort. One hopes the book will reflect that persistence and it does. . . . This is a book that comes recommended, for anyone who wants to know where our current basis of mathematics comes from through to those with an interest in maths and history."--Gordon Clarke, Gazette of the Australian Mathematical Society

"Reimer gives us a detailed introduction to the mathematics of the ancient Egyptians--from their arithmetic operations to their truncated pyramids--in a beautifully designed volume that is so much easier to read than a papyrus scroll."--William Dunham, author of The Calculus Gallery: Masterpieces from Newton to Lebesgue"This book is by far the best presentation of Egyptian math I have read. In an age of overpopularized and sensationalized science reporting, Reimer's crisp prose and concise exposition earned my unqualified admiration. Count Like an Egyptian is destined to become a classic."--Eli Maor, author of e: The Story of a Number "Count Like an Egyptian is well written and entertaining. This book fills a void in popular science writing on Egyptian Mathematics."--Annette Imhausen, section author of The Mathematics of Egypt, Mesopotamia, China, India, and Islam: A Sourcebook

This book as absolutely amazing. But it is ONLY for people who are interested in and enjoy mathematics for recreation or for students that really need to learn something about the subject. This is actually a mathematics textbook, with lessons, examples and exercises. Beware the exercises the author describes as "an especially good exercise". Although it is a textbook, it is not a boring book, it is filled with Egyptian history and examples of Egyptian life and how they applied this

mathematics to their every day problems, and how those problems influenced their calculations, and yes, how they used it to build the pyramids.Be prepared for a shock. Except for the fact that they use numbers, their calculation methods are TOTALLY different from anything you have ever experienced.Hint: How do you calculate the area of a circle? What constant "pi" do you use? Their equivalent constant was not 3.14, it was 8/9. Want to see how they did it?

I love this book! Everything about it is nicely done - the layout, the quality of the paper, the pictures. I particularly like the style of writing and the bits of Egyptian history and culture that bring a lot to the math explanations. The author's deep thoughtfulness and personal understanding for the subject shines through the whole book. I had originally bought this book to help plan a home school block on Egypt for my 5th grader and mistaking it for a book for children. While just reading through it would be too dense for my son, I am really enjoying working through the different chapters myself. There are so many things to learn here, and even things I can include for the 5th grade block - from math ideas to history, geography and cultural details. The material is well-presented - even I am able to figure it out and learn something (I have never been good at math, and all of my math teachers would have described me as a "poor" math student. I have many gaps in my math education). My only critique is that I wish there were a few more practice problems - perhaps not necessarily included in the book, but available for download.

This critter is designed as a teaching tool and has some fun exercises. If you are interested in different math theories this is a great intro to a different way of thinking. An added value is the esoteric descriptions of other things Egyptian that are not necessarily count related. It is what the title implies about counting and uses contemporary coins as examples. What it is not is a book on the more exotic useful math and geometry used by the Egyptians. One book cannot be everything. But I can now Count Like an Egyptian. And it is fun fun fun.

This is so much fun! Furthermore it even helped my own arithmetic. I happily recommend it to anyone with a scintilla of interest in the subject.

I just love this book "Count Like an Egyptian". You will never forget it, an unusual thing to say about a math book, and my highest praise. It is also a beautiful book to go through. It is one of the most interesting and enjoyable volumes I have read in a while but it is also well written ... not to mention ... clear as a bell. discovering a "new" method which has been around for thousands of years was just astonishing. Fascinating subject and fascinating treatment. One thing is that the book has a friendly, approachable tone which draws you easily to the material. This is about the opposite of a 19th century German mathematics text, but it lacks no rigor. The author did a brilliant job.And it is FUN!

Although it looks like a children's picture book, it is a rigorous discussion of Ancient Egyptian math by someone who respects their accomplishments and has actually used their methods. An exciting and in-depth look at the subject.

After the glowing reviews, I found this book, which I bought in the kindle version, disappointing and frustrating because it should have been really enjoyable. (For the hardcover review, skip to the update.) I am sure the course it is taken from would rate at least 5 stars. The book is well-written, the examples are well-chosen and the illustrations are clear and attractive. The author obviously knows his subject and enjoys sharing it with others. He occasionally over-explains, but his college's math entry standards may require that. I can only assume that the glowing reviews were written by readers who didn't try to work the examples and practice problems or that the hardcover edition, which 5 of 6 reviewers read, avoided the typographical problems of the Kindle edition. The problem is mainly the notation and some very poor proof-reading. The author uses the standard English lower case alphabet to represent fractions. I would have expected the Greek alphabet or, at least, a different type face. Instead the reader encounters the apparent word "as" (frequently) and each time has to decide whether that represents the English word or the Egyptian fraction, 1/12. (An example is the calculation example on page 56 "Use inches and feet to simplify's h as feet". In this case the answer shows that 1/12 was meant.) Not to mention the expectation of those who still remember their algebra that it will mean the variable "a" times the variable "s". And maybe college students are more restrained than high school students, but I shudder to think how a class of tenth-graders would react to the statement on page 61 "We can think of h as being composed of two ass." (Which might be taken to mean that 1/6 + 1/12 equals  $2 \times 1/122$ .)In addition, for no obvious reason, he enlists the semi-colon to represent zero and ' to represent two-thirds. The semi-colon, in particular, is easy to pass over as punctuation rather than content. In his examples, he obviously realizes that his readers will become completely confused if they try to follow an unfamiliar method of calculation using these conventions. Instead he shows us neat little scrolls with two columns of our everyday arabic numerals with lines over the ones that represent fractions. This means, though, that when he poses the problem in words, on page 40 for instance "We just multiply ' by 2 s f.", the scroll labelled "A

scribe would calculate it as follows:" uses columns of numbers, with or without bars over them, then states the answer as "1 ' h". And, as an example of proof-reading problems, on page 53 he states "For example, we know that 100 x 32 is 320". Peculiarities in text are one thing. This howler in arithmetic is another. I am really sorry that this book was plagued with notation problems and proof-reading errors because I think it would be excellent if it was easier to interpret. He uses bricks and pizzas to good effect in showing how the Egyptian system might have developed, for instance. He brings to life the bureaucrats, the night-watchmen, the artists and all the others whose lives were ordered by the hand of Thoth, the god of wisdom and scribes. He shows us how the Nile dominated Egypt's very existence, and how mathematics was essential in understanding its day to day effects. I purchased the Kindle edition, but if I had the paper version I think I might have taken the trouble to go through and change all the English-lettered versions of Egyptian fractions to Greek letters for my own ease of reading. As it is, I will have to give it only two-thirds the stars I would have liked to -- or, as the author would have it ' x AAAAA, which equals 1 + d + 2, or 3 d, rounded to 3.UPDATE: The glowing reviews seemed so odd that I finally checked the preview of the hardcover and found that it did not use that confusing notation. Instead it uses arabic numerals surmounted by bars. This makes all clear and I am about to invest \$23.07 in the hardcover on top of the \$16.07 I already paid for the kindle.

This is a work of art, profusely illustrated, and one of best works on the history of mathematics that I've ever read.

#### Download to continue reading...

Count Like an Egyptian: A Hands-on Introduction to Ancient Mathematics [ [ [ Awakening Osiris: The Egyptian Book of the Dead (English, Egyptian) [ AWAKENING OSIRIS: THE EGYPTIAN BOOK OF THE DEAD (ENGLISH, EGYPTIAN) ] By Ellis, Normandi ( Author )Dec-12-1991 Paperback Egyptian Mythology: A Concise Guide to the Ancient Gods and Beliefs of Egyptian Mythology (Greek Mythology - Norse Mythology - Egyptian Mythology Book 3) Alexander: The Great Leader and Hero of Macedonia and Ancient Greece (European History, Ancient History, Ancient Rome, Ancient Greece, Egyptian History, Roman Empire, Roman History) Egyptian Mythology: A Basic Brief Introduction to Egyptian Gods, Goddesses and Ancient Mysteries (Basic Brief Introductions) Egyptian Magic: A history of ancient Egyptian magical practices including amulets, names, spells, enchantments, figures, formulae, supernatural ceremonies, and words of power EGYPTIAN BOOK OF THE DEAD HIEROGLYPH TRANSLATIONS USING TRILINEAR METHOD V.1: Understanding the Mystic Path to Enlightenment Through Direct Readings of ... Signs and Symbols of Ancient

Egyptian The Egyptian Book of Living & Dying: The Illustrated Guide to Ancient Egyptian Wisdom 3rd Grade History: The Egyptian Civilization: Egyptian Books for Kids (Children's Ancient History Books) The Black Count: Glory, Revolution, Betrayal, and the Real Count of Monte Cristo The Black Count: Glory, Revolution, Betrayal, and the Real Count of Monte Cristo (Pulitzer Prize for Biography) The Masonic Magician: The Life and Death of Count Cagliostro and His Egyptian Rite Write Like an Ancient Egyptian! The Ancient Egyptian World (The World in Ancient Times) Ancient Egypt: Pyramids and Pharaohs: Egyptian Books for Kids (Children's Ancient History Books) Egyptian Mythology: Captivating Stories of the Gods, Goddesses, Monsters and Mortals (Norse Mythology - Egyptian Mythology - Greek Mythology Book 2) Stolen Legacy: The Egyptian Origins of Western Philosophy: The Egyptian Origins of Western Philosophy EGYPTIAN LITERATURE Comprising Egyptian Tales Hymns, Litanies Invocations The Book of The dead & Cuneiform Writings Egypt : Egyptian Mythology and The Secrets Of The Gods (Egyptian History, Folklore, Myths and Legends, Pyramids, Egypt, Rome) Conversational Arabic Quick and Easy: Egyptian Dialect, Spoken Egyptian Arabic, Colloquial Arabic of Egypt

Contact Us

DMCA

Privacy

FAQ & Help