

## Fractions In Disguise A Math Adventure

In the first book of the Math Is Categorical® series, readers will become familiar with the concept of addition and its key terms. The author and illustrator of the best-selling Words Are CATEGorical® series use their trademark sense of humor to add up the fun!

When Matt and Bibi are locked inside an Egyptian pyramid with only each other, their dog Riley, and geometric hieroglyphics, the twins must use their math knowledge to solve the riddles on the walls and locate the burial chamber.

Ten years after being tricked, Rumpelstiltskin returns to the royal family to wreak vengeance using multiplication. Includes nonfiction math notes about multiplying by whole numbers and by fractions.

Celebrate diversity, math, and the power of storytelling! On Luna's birthday, the whole family goes out for dim sum—but Luna and her brothers can't agree on how to share their pork buns fairly. How can three people divide up five buns? Should some siblings get more than others? Or should they cut the buns into smaller and smaller pieces so everyone gets the same amount?

A playful exploration of division and fractions, featuring Chinese American characters and a cultural note. Storytelling Math celebrates children using math in their daily adventures as they play, build, and discover the world around them. Joyful stories and hands-on activities make it easy for kids and their grown-ups to explore everyday math together. Developed in collaboration with math experts at STEM education nonprofit TERC, under a grant from the Heising-Simons Foundation.

An Adventure in Geometry  
Luna's Yum Yum Dim Sum

Full House

A Very Improbable Story

Mystery Math

Multiplying Menace: The Revenge of Rumpelstiltskin

When a valuable fraction goes missing, young inventor George Cornelius Factor, suspecting the work of the villainous Dr. Brok, creates a tool for simplifying and revealing fractions that have been sneakily disguised. By the author of A Very Improbable Story. Simultaneous.

Food is cut into halves, quarters, and thirds to illustrate how parts make a whole. Simple recipes included.

Edward Einhorn blends absurdist humor with philosophy in these critically acclaimed plays about legendary Jewish figures. Golem Stories retells an old Kabbalistic legend. It's a ghost story and a love story, about a childlike clay man who may be a demon inside. In The Living Methuselah, the oldest living man survives every disaster in human history, with the help of his wife Serach, the oldest living woman. But when a doctor tells him he will only live until the end of the play, will this be his final curtain? To find the title character of A Shylock, Jacob Levy interrogates every character in The Merchant of Venice, but oddly Hamlet may know the most-although this Hamlet is a woman. And in One-Eyed Moses and the Churning Red Sea, Rabbi

Tzipporah Finestein dreams Moses is a pirate captain, but what do the dreams mean? Two congregants hold the key.

Crack the case with George Cornelius Factor in this entertaining math adventure that introduces simplified and reduced fractions with intrigue and humor When a valuable fraction goes missing, George Cornelius Factor (a.k.a. GCF) vows to track it down. Knowing that the villainous Dr. Brok likes to disguise his ill-gotten fractions, GCF invents a Reducer—half ray gun, half calculator— that strips away the disguise, reducing the fraction to its lowest common denominator and revealing its true form. With the Reducer in hand, George seeks out Dr. Brok in hopes of retrieving the missing fraction. Back matter includes more detail on simplifying, or reducing, fractions.

I'm Trying to Love Math

Fractions=decimals=percents/ Fracciones=decimales=porcentajes

Hockey

A Math Adventure

A Second, a Minute, a Week with Days in It

Living Proof

Julie Ellis and Phyllis Hornung Peacock team up once again to explore Pythagorean ratios in this humorous sequel to WHAT'S YOUR ANGLE, PYTHAGORAS? Pythagoras and his cousins want to win a music contest, but first they must figure out how to play their instruments in tune, something that's never been done before. While trying

to fix the problem, Pythagoras makes an important discovery—notes that sound pleasant together have a certain mathematical relationship. When Pythagoras applies this ratio to his cousins' pipes and lyres, the result is music to the ears.

Miss Prime and her animal students explore fractions by finding many examples in the world around them.

When the teacher tells her class that they can think of almost everything as a math problem, one student acquires a math anxiety which becomes a real curse.

“Witty, compelling, and just plain fun to read . . .” —Evelyn Lamb, Scientific American The Freakonomics of math—a math-world superstar unveils the hidden beauty and logic of the world and puts its power in our hands The math we learn in school can seem like a dull set of rules, laid down by the ancients and not to be questioned. In

How Not to Be Wrong, Jordan Ellenberg shows us how terribly limiting this view is: Math isn't confined to abstract incidents that never occur in real life, but rather touches everything we do—the whole world is shot through with it. Math allows us to see the hidden structures underneath the messy and chaotic surface of our world. It's a science of not being wrong, hammered out by centuries of hard work and argument. Armed with the tools of mathematics, we can see through to the true meaning of information we take for granted: How early should you get to the airport? What does “public opinion” really represent? Why do tall parents have shorter children? Who

really won Florida in 2000? And how likely are you, really, to develop cancer? How Not to Be Wrong presents the surprising revelations behind all of these questions and many more, using the mathematician's method of analyzing life and exposing the hard-won insights of the academic community to the layman—minus the jargon.

Ellenberg chases mathematical threads through a vast range of time and space, from the everyday to the cosmic, encountering, among other things, baseball, Reaganomics, daring lottery schemes, Voltaire, the replicability crisis in psychology, Italian Renaissance painting, artificial languages, the development of non-Euclidean geometry, the coming obesity apocalypse, Antonin Scalia's views on crime and punishment, the psychology of slime molds, what Facebook can and can't figure out about you, and the existence of God. Ellenberg pulls from history as well as from the latest theoretical developments to provide those not trained in math with the

knowledge they need. Math, as Ellenberg says, is “an atomic-powered prosthesis that you attach to your common sense, vastly multiplying its reach and strength.” With the tools of mathematics in hand, you can understand the world in a deeper, more meaningful way. How Not to Be Wrong will show you how.

The Golem, Methuselah, and Shylock

How Families Can Learn Math Together—and Enjoy It

Fractions Are Fun

An Invitation to Fractions

Counting on Frank

In this introduction to fractions, five hungry guests, searching for the perfect midnight snack, help themselves to Miss Bloom's delicious cake during their stay at the Strawberry Inn.

For use in schools and libraries only. Explains how, in the language of mathematics, fractions, decimals and percents are three different ways of describing the same parts of things. Excellent photographs illustrate the concepts.

A boy and his dog present amusing counting, size comparison, and mathematical facts.

\*Presents the mathematical concepts involved with the sport of hockey --Provided by publisher.

Fractions, Decimals, and Percents

Apple Fractions

The Power of Mathematical Thinking

Plays by Edward Einhorn

Eating Fractions

Whole-y Cow!

In this fun-filled look at fractions, Brian P. Cleary and Brian Gable demonstrate how fractions-work by splitting whole objects into parts. The comical cats of the wildly popular Words Are CATEGorical® series divide everything from pieces of pizza to groups of people into halves, thirds, tenths, and more. Peppy rhymes, goofy illustrations, and kid-friendly examples take the fear out of fractions.

Learning about fractions isn't always easy, but who says it can't be fun? Using one very entertaining cow, math teacher Taryn Souders has devised a very clever (and fun) way of explaining fractions to beginning learners. One whole cow, calmly eating hay, decided to act differently on this particular day. One whole cow - what should we do? I know! Let's paint one half blue! Prompted by a poem and a visual clue, students are asked to answer what fraction is illustrated in the cow's antics, starting with halves and progressing into thirds, fourths, eighths, and tenths. What fraction of the cow is blue? Answer: ½ What fraction of the cow is white? Answer: ½ With the math problem featured as part of the

artwork, students get an immediate sense of how to apply and understand the concept of fractions. How moo-velous! Taryn J. Souders lives in Winter Park, Florida. With a background in math education, she is passionate about keeping math fun for young students. This is her first children's book. Tatjana Mai-Wyss was born in Switzerland. She remembers

learning about fractions with the help of a typical Swiss cake. Tatjana has illustrated several children's books and her work has been published in books and magazines in the United States and abroad. She lives in South Carolina.

An introduction to computational complexity theory, its connections and interactions with mathematics, and its central role in the natural and social sciences, technology, and philosophy Mathematics and Computation provides a broad, conceptual overview of computational complexity theory—the mathematical study of efficient computation. With

important practical applications to computer science and industry, computational complexity theory has evolved into a highly interdisciplinary field, with strong links to most mathematical areas and to a growing number of scientific endeavors. Avi Wigderson takes a sweeping survey of complexity theory, emphasizing the field's insights and challenges. He explains the ideas and motivations leading to key models, notions, and results. In particular, he looks at algorithms and complexity, computations and proofs, randomness and interaction, quantum and arithmetic computation, and cryptography and learning, all as parts of a cohesive whole with numerous cross-influences. Wigderson illustrates the immense

breadth of the field, its beauty and richness, and its diverse and growing interactions with other areas of mathematics. He ends with a comprehensive look at the theory of computation, its methodology and aspirations, and the unique and fundamental ways in which it has shaped and will further shape science, technology, and society. For further reading, an extensive bibliography is provided for all topics covered. Mathematics and Computation is useful for undergraduate and graduate students in mathematics, computer science, and related fields, as well as researchers and teachers in these fields. Many parts require little background, and serve as an invitation to newcomers seeking an introduction to

the theory of computation. Comprehensive coverage of computational complexity theory, and beyond High-level, intuitive exposition, which brings conceptual clarity to this central and dynamic scientific discipline Historical accounts of the evolution and motivations of central concepts and models A broad view of the theory of computation's influence on science, technology, and society Extensive bibliography

Introduces fractions by using the pieces of a chocolate bar to demonstrate the different parts that make up a whole item

Pythagoras and the Ratios

Sir Cumference and the Viking's Map

A Fraction's Goal — Parts of a Whole

Mathematics and Computation

Making Number Talks Matter

Fraction Fun

*Spoo! There is a mystery behind every door of the creepy haunted house. Luckily, algebra will help you solve each problem. By using simple addition, subtraction, multiplication, and division, you'll discover that solving math mysteries isn't scary at all -- it's fun!*

From the author of the highly successful *The Complete Idiot's Guide to Calculus* comes the perfect book for high school and college students. Following a standard algebra curriculum, it will teach students the basics so that they can make sense of their textbooks and get through algebra class with flying colors.

*Playful elves use a variety of different apples—including Granny Smiths, Cortlands, Golden Delicious, and Red Delicious—to teach kids all about fractions as they divide apples into halves, thirds, fourths, and more. Original.*

*Waking up one morning to find a talking cat on his head, Ethan is informed that the cat will not leave until he - Ethan - wins a game of probability.*

*How Not to Be Wrong*

*The Hershey's Milk Chocolate Bar Fractions Book*

*Making Sense of Fraction Computation*

*A Book about Time*

*A Place for Zero*

*Fractions = Trouble!*

Step right up! Come take part in the county fair, where you'll see fractions, decimals, and percents everywhere. Gobble up a fraction of pie, boost your batting average in the arcade, and take a percent off the price of a toy. Learning about equivalent parts equals a whole lot of fun in this straightforward introduction to a challenging concept.

This resource builds on the foundational understandings that are described in Beyond Pizzas and Pies: 10 Essential Strategies for Supporting Fraction Sense and applies them to situations involving fraction computation. The eight stand-alone chapters are organized within the same friendly, easily accessible framework as Beyond Pizzas and Pies. Each chapter offers classroom activities for

investigating the meaning of fractions; fractions as numbers; fraction addition and subtraction; fraction multiplication and division; and classroom discussions on fractions. Activities are connected to the Common Core State Standards and include reproducibles. The accompanying DVD brings to life many of the activities in the book, featuring more than 30 authentic classroom video clips.

The zany CATEGorical cats introduce the measurement of time, from seconds, minutes, and hours up to decades. Brian P. Cleary and Brian Gable bring their winning teamwork to this playful, fun look at learning about time.

Wow! This is a powerful book that addresses a long-standing elephant in the mathematics room. Many people learning math ask “Why is math so hard for me while everyone else understands it?” and “Am I good enough to succeed in math?” In answering these questions the book shares personal stories from many now-accomplished mathematicians affirming that “You are not alone; math is hard for everyone” and “Yes, you are good enough.” Along the way the book addresses other issues such as biases and prejudices that mathematicians encounter, and it provides inspiration and emotional support for mathematicians ranging from the experienced professor to the struggling mathematics student. –Michael Dorff, MAA President This book is a remarkable collection of personal

reflections on what it means to be, and to become, a mathematician. Each story reveals a unique and refreshing understanding of the barriers erected by our cultural focus on “math is hard.” Indeed, mathematics is hard, and so are many other things—as Stephen Kennedy points out in his cogent introduction. This collection of essays offers inspiration to students of mathematics and to mathematicians at every career stage. –Jill Pipher, AMS President This book is published in cooperation with the Mathematical Association of America.

A Theory Revolutionizing Technology and Science

A First Book of Algebra

Piece=Part=Portion/ Padazo=Parte=Porcion

Beyond Invert and Multiply, Grades 3-6

Let's Play Math

The Mission of Addition

*Would you rather eat 1/4 of a pizza or 1/8 of a pizza? Find 3/4 of a dollar or 1/10 of a dollar? Confused? You don't have to be! Fractions are made easy in this simple and hands-on math concept book. You'll learn what the top and bottom numbers are called, and what they mean. You will also find out how to recognize and compare different fractions. Just follow the clear instructions and you will learn the most important thing of all -- that fractions can be fun!*

*For fans of the Sir Cumference series with coordinate geometry on their mind, here is the seventh installment in this fun look at math and language. While riding through the forests of Angleland, cousins Per and Radius realize they are lost and are desperate for a map to guide them home. Soon they come across a mysterious house in the hills. Inside they find a map to a treasure belonging to Xaxon Yellowbeard, the fiercest Viking warrior of his time. Per and Radius must decode the strange numbered grid on the map, while trying to steer clear of the pack of bungling bandits who are on their tail. Will they find the treasure in time? Cindy Neuschwander delivers yet another intriguing math adventure featuring the well-known characters of Angleland. Readers will*

*enjoy following Per and Radius in their quest while learning how coordinate geometry relates to everyday life. Wayne Geehan's beautiful illustrations offer a bit of comic relief, while also clearly demonstrating the concepts explored in the story.*

*In this fun look at area and perimeter, dinnertime becomes a real mess as guests rearrange the carefully placed tables and chairs.*

*The coach of the soccer team is a math teacher. And the name of the team is the Fractions. The numbers on the kids' uniforms are fractions. At half time, the kids eat orange slices that are cut in halves, quarters, and thirds. All of these fractions add up to two things-a winning team and lots of fun! Illustrated by Chris Demarest.*

*Developing Mathematical Practices and Deepening Understanding, Grades 4-10*

*What's Your Angle, Pythagoras?*

*Math Curse*

*Fractions in Disguise*

*Stories of Resilience Along the Mathematical Journey*

*If You Were a Fraction*

*Zero is lonely in Digitaria. He can't play Addemup with the other numbers, because he has nothing to add. What's a digit to do? Join Zero as he goes on a journey to discover his place.*

*Making Number Talks Matter is about the myriad decisions facing teachers as they make this fifteen-minute daily routine a vibrant and vital part of their mathematics instruction. Throughout the book, Cathy Humphreys and Ruth Parker offer practical ideas for using Number Talks to help students learn to reason numerically and build a solid foundation for the study of mathematics. This book will be an invaluable resource whether you are already using Number Talks or not; whether you are an elementary, middle school, high school, or college teacher; or even if you are a parent wanting to support your child with mathematics. Using insight gained from many years of doing Number Talks with students of all ages, Cathy and Ruth address questions to ask during Number Talks, teacher moves that turn the thinking over to students, the mathematics behind the various strategies, and ways to overcome bumps in the road. If you've been looking for ways to transform your mathematics classroom—to bring sense-making and divergent thinking to the foreground, to bring the Standards for Mathematical Practice to life, and to bring joy back into your instruction—this book is for you.*

*Crack the case with George Cornelius Factor in this entertaining math adventure that introduces simplified and reduced fractions with equal parts intrigue and humor. When a valuable fraction goes missing, George Cornelius Factor (a.k.a. GCF) vows to track it down. Knowing that the villainous Dr. Brok likes to disguise his ill-gotten fractions, GCF invents a Reducer—half ray gun, half calculator—that strips away the disguise, reducing the fraction to its lowest common denominator and revealing its true form. With the Reducer in hand, George seeks out Dr. Brok in hopes of retrieving the missing fraction. Back matter includes more detail on simplifying, or reducing, fractions.*

*Children's Choice Award winner Bethany Barton applies her signature humor to the scariest subject of all: math! Do multiplication tables give you hives? Do you break out in a sweat when you see more than a few numbers hanging out together? Then I'm Trying to Love Math is for you! In her signature hilarious style, Bethany Barton introduces readers to the things (and people) that use math in amazing ways -- like music, and spacecraft, and even baking cookies! This isn't a how-to math book, it's a way to think differently about math as a necessary and cool part of our lives!*

*Spaghetti and Meatballs for All! a Mathematical Story*

*Mummy Math*

*Fraction Action*

*Go, Fractions!*

*The Complete Idiot's Guide to Algebra*

While trying to decide on a science fair project, third-grader Wilson struggles with with fractions and, much to his embarrassment, his parents sign him up to work with a math tutor.

A basic introduction to the concept of fractions.

In ancient Greece, young Pythagoras discovers a special number pattern (the Pythagorean theorem) and uses it to solve problems involving right triangles.