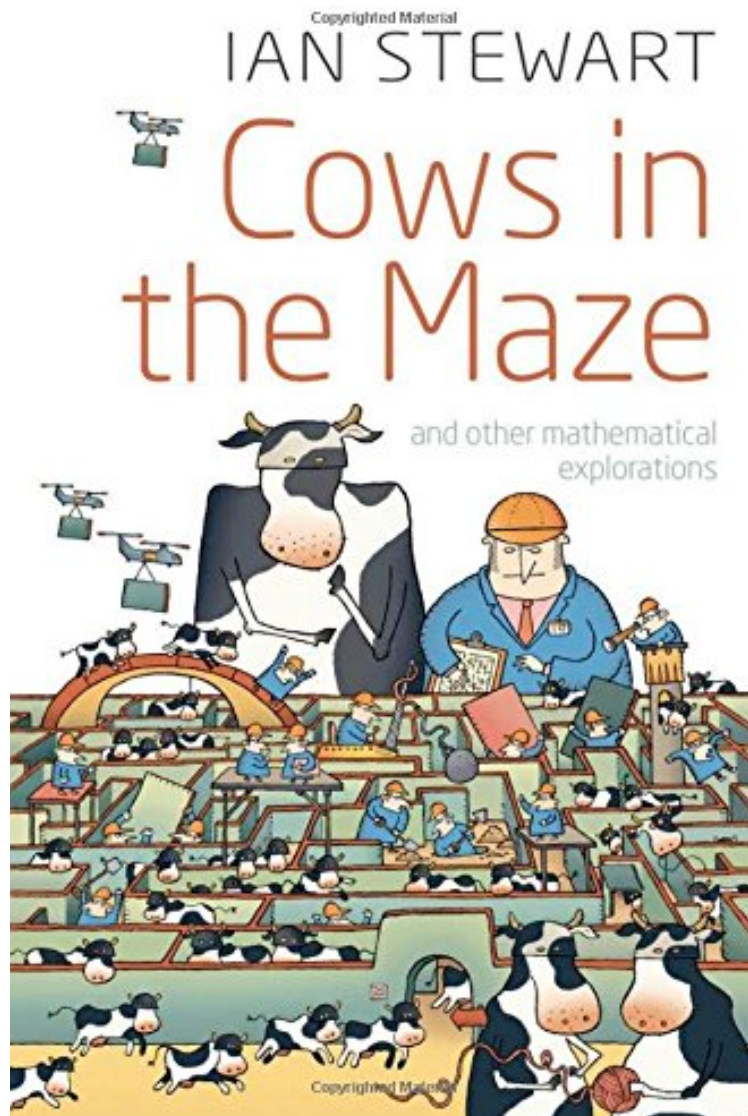


Cows in the Maze: And Other Mathematical Explorations

Ian Stewart

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Ian Stewart : Cows in the Maze: And Other Mathematical Explorations before purchasing it in order to gage whether or not it would be worth my time, and all praised Cows in the Maze: And Other Mathematical Explorations:

2 of 2 people found the following review helpful. Buyable Book - but poor quality of bindingBy KRISHNA JAGA've been looking forward to this book - which was delayed by almost a year after it was announced and am bit disappointed with the content - not as entertaining with his "recreational maths " as Ian Stewart's previous books like Maths hysteria as the topics are more physics and less recreational maths etcStewart covers mathematics of time

travel, explores the shape of teardrops (physics ?), strategies for the game of Hex, and the title "Where Are the Cows?" maze, which changes every time you pass through it. He also covers on how to count magic squares, describes the mathematical patterns in animal movement (with a story more about Tarzan and Jane than the actual problem) and the physics of sand piles etc though all embellished with wit, humour and delightful cartoons. Another gripe is on the quality of binding as the book has come apart within 4-5 days and also why has the book size been reduced from the earlier comfortable standard 9 x 6 to 7 x 5 as in *Math Hysteria* and *How to Cut a Cake*. Most inconvenient. 1 of 2 people found the following review helpful. Good but not Stewart's best. By Per Holst 21 chapters of mathematical recreation. Usually I find the professor's books rather entertaining, but I must say I'm feeling a bit disappointed about this volume. It's off to a good start with "the Lore and Lure of Dice" - the context specific reflection on the question of probability, and the non-transitive dice. Then quickly passing Piet Hein's board game Hex. Why we're introduced to Tarzan and Jane in the midst of an otherwise interesting subject, "Walking with quadrupeds" - the patterns of the gaits of four legged animals, I have no idea. Chapters 7, 8, and 9 touches upon time travel, which - as I recall it - is much more physics and sci-fi than mathematics. Luckily though chapter 10 serves a nice gem - *Cone with a Twist* - the sphericon. Chapter 11 touches upon the shape of a drop, and in chapter 12 we're back to probability and fallacies in *The Interrogator's Fallacy*, where we now use Bayes' theorem and Mathews's formula. There's an error in the formula printed on page 173 at the top though, it should be: $P(A|C) = P(C|A) * P(A) / P(C)$ Then we get to the title chapter: *Cows in the Maze*. And while it has cows and is kind of a maze - it's not a standard maze, it's a maze of logic statements. Leaving the maze on a Knight's Tour into Cat's Cradle over Klein bottles (and Möbius bands) into Voronoi cells into knots, which again I found a bit disappointing. The construction of Most Perfect Squares are matched up with Mathematical impossibilities. The final chapter of the book regards dancing with strings forming regular solids.

Following on the success of his books *Math Hysteria* and *How to Cut a Cake*, Ian Stewart is back with more stories and puzzles that are as quirky as they are fascinating, and each from the cutting edge of the world of mathematics. From the math of mazes, to cones with a twist, and the amazing sphericon--and how to make one--*Cows in the Maze* takes readers on an exhilarating tour of the world of mathematics. We find out about the mathematics of time travel, explore the shape of teardrops (which are not tear-drop shaped, but something much, much more strange), dance with dodecahedra, and play the game of Hex, among many more strange and delightful mathematical diversions. In the title essay, Stewart introduces readers to Robert Abbott's mind-bending "Where Are the Cows?" maze, which changes every time you pass through it, and is said to be the most difficult maze ever invented. In addition, he shows how a 90-year old woman and a computer scientist cracked a long-standing question about counting magic squares, describes the mathematical patterns in animal movement (walk, trot, gallop), looks at a fusion of art, mathematics, and the physics of sand piles, and reveals how mathematicians can--and do--prove a negative. Populated by amazing creatures, strange characters, and astonishing mathematics explained in an accessible and fun way, and illustrated with quirky cartoons by artist Spike Gerrell, *Cows in the Maze* will delight everyone who loves mathematics, puzzles and mathematical conundrums.

His easy style...makes the explanation of maths behind black holes, animal gait and time travel simple to digest. * Dominic Lenton, Engineering and Technology * About the Author Ian Stewart is a monthly contributor to the highly popular "Recreational Mathematics" column in *Scientific American*. Professor of Mathematics and Director of the Mathematics Awareness Centre at Warwick University, he is both an active research mathematician and a well-known popularizer of mathematics and related areas of science. In 1995 he was awarded the Michael Faraday Award for furthering the public understanding of science. A Fellow of the Royal Society, his many books include *Flatterland* and *The Magical Maze*.