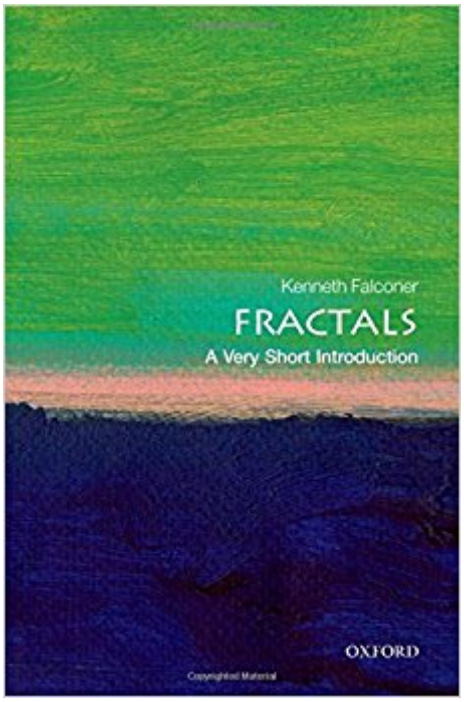
Fractals: A Very Short Introduction (Very Short Introductions)



Synopsis

From the contours of coastlines to the outlines of clouds, and the branching of trees, fractal shapes can be found everywhere in nature. In this Very Short Introduction, Kenneth Falconer explains the basic concepts of fractal geometry, which produced a revolution in our mathematical understanding of patterns in the twentieth century, and explores the wide range of applications in science, and in aspects of economics.About the Series:Oxford’s Very Short Introductions series offers concise and original introductions to a wide range of subjects--from Islam to Sociology, Politics to Classics, Literary Theory to History, and Archaeology to the Bible. Not simply a textbook of definitions, each volume in this series provides trenchant and provocative--yet always balanced and complete--discussions of the central issues in a given discipline or field. Every Very Short Introduction gives a readable evolution of the subject in question, demonstrating how the subject has developed and how it has influenced society. Eventually, the series will encompass every major academic discipline, offering all students an accessible and abundant reference library. Whatever the area of study that one deems important or appealing, whatever the topic that fascinates the general reader, the Very Short Introductions series has a handy and affordable guide that will likely prove indispensable.

Book Information

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Customer Reviews

"If you are not familiar with the mathematical basis of fractals, the basic history of the development

of the field and how they can be used to describe many natural processes, then this book will serve as an effective primer." --MAA Reviews"Anyone intrigued by gorgeous pictures of fractals seen in other books or online may turn here to learn about the mathematics behind them...The present book includes references to important papers, some background history, and fascinating applications." --CHOICE

Kenneth Falconer, Professor of Pure Mathematics, University of St AndrewsKenneth Falconer is Professor of Pure Mathematics at St Andrews University. He has published many papers on fractal geometry, and three books on the topic, including Fractal Geometry: Mathematical Foundations and Applications (Wiley-Blackwell).

As the name suggests, this book provides a short introduction of fractals, the math behind them, their application, and history. I came into this book having been inspired by watching a few documentaries on the subject matter and desiring to know just a little bit more about the mathematics behind fractals. This book did so effectively, and gave very good explanations of not only the mathematics of fractals, but also all of the supporting math used. The only reason I rated this book a 4/5 and not higher is that it appears to have a couple of errors in some of the equations. That or one or two of explanations were written in a way that left me very confused with how the author arrived at a conclusion.

This is thrilling because you can plot examples yourself. Meaning that the whole thing is simple but the result will spray a complex beauty at your face. Behold! You are about to fall in love :-) Very entertaining book.

This covers the basics well. It prepared me to read through Mandelbrot’s "Fractal Geometry of Nature" with a good understanding of the ideas. It took me from "layperson" to "less laypersony." Great!

The writing was clear and concise---a good introduction. It is especially good at explaining the differences in the various fractals.

Very good introductory Book

Clear, concise, adn to the point.

Love this series. Well written and argued.

Great help with fractal research.

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