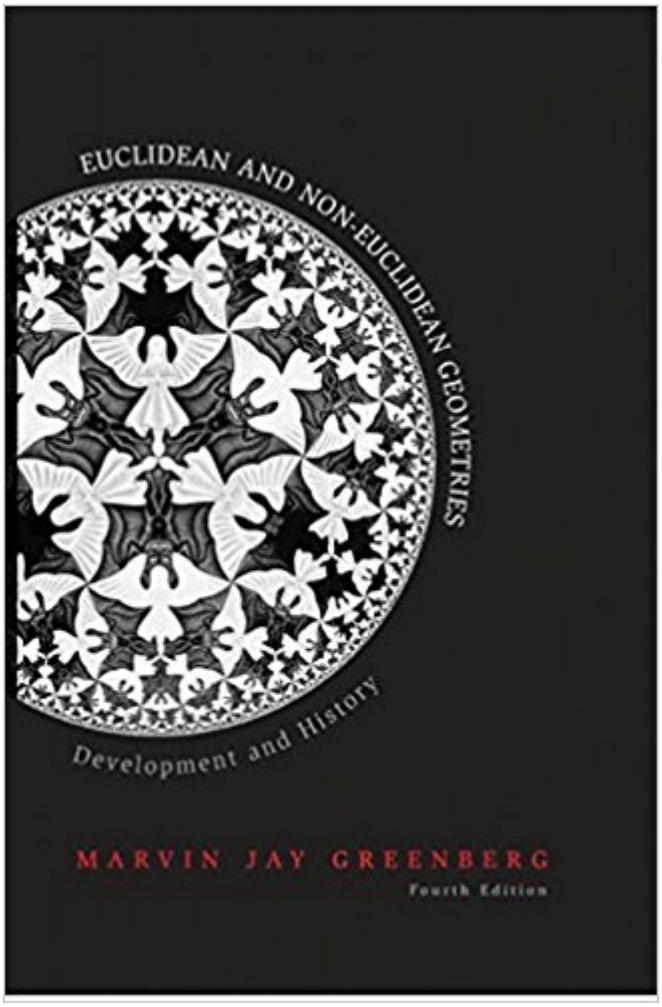
Euclidean And Non-Euclidean Geometries: Development And History



Synopsis

This is the definitive presentation of the history, development and philosophical significance of non-Euclidean geometry as well as of the rigorous foundations for it and for elementary Euclidean geometry, essentially according to Hilbert. Appropriate for liberal arts students, prospective high school teachers, math. majors, and even bright high school students. The first eight chapters are mostly accessible to any educated reader; the last two chapters and the two appendices contain more advanced material, such as the classification of motions, hyperbolic trigonometry, hyperbolic constructions, classification of Hilbert planes and an introduction to Riemannian geometry.

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Customer Reviews

MARVIN JAY GREENBERG, University of California, Santa Cruz, USA.

I really enjoy this book! I'm taking a geometry course in college, and I find the theorems, projects, and proof exercises rather fun. You get to learn about the history of geometry, and more importantly, you get to try out some of the proofs on geometry itself. Great book if you want to learn on your own. Some topics might be advanced, but no worries, just study the other topics, and presto, you can come back and tackle the more advanced problems.

This is the most comprehensive exposition of non-euclidean geometries, with an emphasis on hyperbolic geometry.Greenberg is didactic, clear, precise and gives here an illuminating treatment

of those subjects, preceded by a very good review of both the euclidean background as well as the historical aspects.I really enjoyed reading this book and wish Greenberg would give us the same marvel on elliptic geometry, one day, even though I realize he is retired...

Fascinating. The history is quite good. Very interesting.

This text provides a wealth of knowledge about geometry. For me, with only a minimum of college level geometry previously studied, it was my first meeting with a rigorous development of any type of geometry, euclidean or noneuclidean. It was very exciting to see how this subject can be so carefully developed. Even though I was exposed to a meticulous construction of real analysis and algebra ,there is quite a difference in the techniques used to develop geometry, which you might anticipate.Each time I have reviewed Dr.Greenberg's text, I am not only able to retain the material easier, but also to achieve a new level of understanding, which is kind of surprising.This text is a treasure of knowledge of geometry, but the reader, if not much better prepared than me, needs to understand that digesting this text requires a bit of a committment , but it is well worth the effort. If you are a prior football player, like me, you will probably remember the coach mentioning it will take a 110% effort to win. This is a different way of indicating how tenacious, I feel, you will need to be.I am really looking forward to reading Dr. Greenberg's most recent edition of this text, which is now available.

So my wife got this a while ago, and she got it for cheaper than what she would pay if she bought it from school. It was a good deal.

good book

I am in week 3 of a 12 week course and the pages are falling out of the binding. Not happy

had coffee stains but i paid for a used one so all is well.

Geometry in the Theory of Automorphic Functions (History of Mathematics) Janos Bolyai, Non-Euclidean Geometry, and the Nature of Space Taxicab Geometry: An Adventure in Non-Euclidean Geometry (Dover Books on Mathematics) Non-Euclidean Geometry for Babies (Math for Babies) Non-Euclidean Geometry (Dover Books on Mathematics) Introduction to Non-Euclidean Geometry (Dover Books on Mathematics) Non-Euclidean Geometry (Mathematical Association of America Textbooks) Non-Euclidean Adventures on the LÃƒÂ©nÃƒÂ¡rt Sphere The Non-Euclidean Revolution (Modern BirkhÃƒÂ¤user Classics) The Non-Euclidean Revolution The elements of non-Euclidean geometry A Course in Modern Geometries (Undergraduate Texts in Mathematics) Journey into Geometries (Spectrum) Thinking Geometrically: A Survey of Geometries (Mathematical Association of America Textbooks)