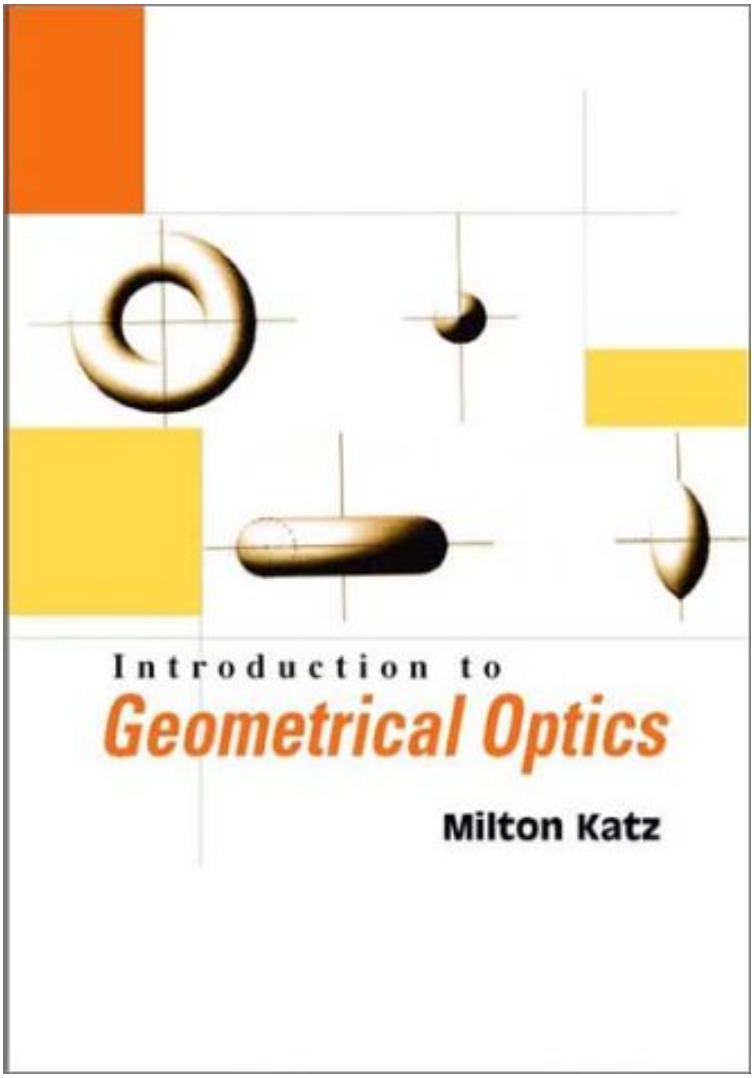
Introduction to Geometrical Optics

Milton Katz
*audiobook | *ebooks | Download PDF | ePub | DOC*



#2460832 in Books World Scientific Pub Co Inc 2002-12-11Original language:EnglishPDF # 1 10.00 x 7.25 x .75l, 1.75 #File Name: 981238202X328 pages | File size: 54.Mb

Milton Katz : Introduction to Geometrical Optics before purchasing it in order to gage whether or not it would be worth my time, and all praised Introduction to Geometrical Optics:

2 of 3 people found the following review helpful. WORT TEXTBOOK EVERBy Philip BartholomewOn top of the boring subject that is geometrical optics this book, is the easily the worst text book i've ever had to use, not only are many of the answers wrong, there are numerous typos, the book has little to no examples, its format and setup are very poorly done and on top of all that the index is also terribly lacking. Unless you're a masochist stay away from this s***ty book0 of 1 people found the following review helpful. Solid but not excitingBy SteveI intend to use this book as the basis for a course, but I have to add quite a lot too it. It does not mention paraxial ray matrices, which are the

method of choice for today's computer-oriented students. The problems generally don't require much initiative- mainly numerical substitutions in formulae. There are no experimental results (e.g photographs of images to show how well the theory really works). But the main developments are there and they are quite clear.2 of 4 people found the following review helpful. not impressedBy CraigThis book has many serious errors in the problem sections of the chapters. The answers are many times incorrect, and there are no step-by-step explinations for the problems offered nor is there a solutions manual. Learning optics is tough enough without the book confusing and incorrect in many instances. Its hard to trust the book's answers. Our class and our professor have proved several instances of the answers being incorrect. While most of the answers are correct, some of them are not: enough that it keeps you wondering. The diagrams and explinations are sometimes hard to follow. For any professors that might consider this book for their students, I would tell you to find a better book - or get your money back! If I had to rely solely on this book, I would have given up. Luckly, our course offered another book, and the library had many other books that were much better.

This book is the culmination of twenty-five years of teaching Geometrical Optics. The volume is organised such that the single spherical refracting surface is the basic optical element. Spherical mirrors are treated as special cases of refraction, with the same applicable equations. Thin lens equations follow as combinations of spherical refracting surfaces while the cardinal points of the thick lens make it equivalent to a thin lens. Ultimately, one set of vergence equations are applicable to all these elements.The chapters are devoted to in-depth treatments of stops, pupils and ports; magnifiers, microscopes, telescopes, and camera lenses; ophthalmic instruments; resolving power and MTF; trigonometric ray tracing; and chromatic and monochromatic aberrations. There are over 100 worked examples, 400 homework problems and 400 illustrations.First published in 1994 by Penumbra Publishing Co.

?This text is ideal for optometrists, opticians in various roles and ophthalmologists, being based on extensive experience teaching students."About the AuthorMilton Katz is a Professor of Optics at SUNY State College of Optometry in New York Where he has taught geometrical optics for over 20 years. His research has been in vision through optical devices. He also is an optical consultant and lens designer.