



Mathematical Modelling: A Case Studies Approach

By Reinhard Illner, C. Sean Bohun, Samantha McCollum, Thea Van Roode

American Mathematical Society. Paperback. Book Condition: new. BRAND NEW, Mathematical Modelling: A Case Studies Approach, Reinhard Illner, C. Sean Bohun, Samantha McCollum, Thea Van Roode, Mathematical modelling is a subject without boundaries. It is the means by which mathematics becomes useful to virtually any subject. Moreover, modelling has been and continues to be a driving force for the development of mathematics itself. This book explains the process of modelling real situations to obtain mathematical problems that can be analyzed, thus solving the original problem. The presentation is in the form of case studies, which are developed much as they would be in true applications. In many cases, an initial model is created, then modified along the way. Some cases are familiar, such as the evaluation of an annuity. Others are unique, such as the fascinating situation in which an engineer, armed only with a slide rule, had 24 hours to compute whether a valve would hold when a temporary rock plug was removed from a water tunnel. Each chapter ends with a set of exercises and some suggestions for class projects. Some projects are extensive, as with the explorations of the predator-prey model; others are more modest. The text was designed to...



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Reviews

Extensive information! Its this type of excellent study. I have read and i am sure that i will gonna go through yet again once more down the road. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- **Aliyah Mayer**

Thorough guideline! Its this type of good read. It is really simplistic but shocks from the 50 percent from the publication. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- **Sallie Wiegand**