Simplifying the Slide Rule, Robert F. Marks, 1964

The text is one in the Bantam Unifact series of "programmed learning" texts. I place the phrase in quotation marks because, like many quickly written or produced "programmed learning" texts, it fails to most effectively use the feedback component of programmed learning. The book is self-paced, it does present the material in small units, it does test the student after each unit or frame, and it does test the student's knowledge of the material immediately after the material is presented. It provides however, only the most rudimentary feedback (positive or negative) concerning the student's answers to questions. If the student answers a question incorrectly, the "feedback" consists of telling the student to go back over the original material, with no additional discussion or information being presented.

The book seems to be aimed at students with a minimal high school mathematics education; at one point the text notes, "...it is assumed that the reader is familiar with the elements of trigonometry." Logarithms are introduced efficiently and easily. The author's approach would be useful to anyone needing to use the slide rule as an aid, but only the simplest of mathematical topics are covered. All of the material is presented in a non-threatening manner. As a programmed learning text, the book is most suited for self-instruction.

The author uses no theory on either slide rule design and construction, or in the mathematical examples used in teaching. Simple numerical examples and exercises are used rather than applied problems.

The scale set used is that of a K&E "Polyphase Duplex Decitrig". In an introductory section, an illustration is provided of a rule that is labeled K&E and looks like a 4070-3 but with an SRT scale instead of an ST scale.

The book contains an addendum entitled, "How to Convert Measurements Easily" providing the relevant conversion factors and how to use them on the C and D scales. As is common with programmed learning texts, there is no index.

Steve K. Seale. 2013