The Slide Rule, Johnson, 1949, 4th printing 1955

The text, originally published in 1949, is aimed at technical readers (specifically engineering students) with a reasonable background in mathematics. Numerous references in the text to "...the engineer's slide rule..." indicate the author's intended audience (as well as his use of differential calculus in a footnote to prove the error in using the C and D scales for multiplication is constant, no matter which part of the scales are used). The book would be effectively useful either for self-study or in a classroom setting.

The author provides sufficient background theory for the construction and use of the slide rule but does not dwell on it. The presentation of this material does not intrude on the well organized and very clear explanations of 'how' to use the tool. Examples and exercises in each chapter are almost entirely numerical, rather than applied. Answers to chapter exercises are provided.

The author confines his approach to Mannheim and Duplex linear rules, with specific references to those produced by K&E, whose rules are used in illustrations throughout the text. The scale set discussed is typical of most Log Log Duplex rules. There are instructions on how to determine hyperbolic trig function values but no mention of Vector rules or of hyperbolic trig scales. There is, of course, no mention of a Pythagorean P scale.

There are no addenda or appendices. The $3\frac{1}{2}$ page index is adequate but its expansion would have enhanced the book's value as a reference work.

Steve K. Seale. 2013