

P R E F A C E

The slide rule is an indispensable calculating tool for the student of mathematics, the physical sciences, engineering, business and statistics. Because of its simplicity in solving quickly and accurately mathematical problems involving products, quotients, powers, and roots, the use of the slide rule is becoming more and more prevalent. In most of the common, every-day problems three-figure accuracy is adequate. In the solution of such problems, the use of the slide rule is an economic necessity, for it saves time and mental strain. When more than three-figure accuracy is needed, and calculating machines are used when available, or ordinary arithmetic computational methods are resorted to, the slide rule provides a simple check.

Anyone may learn the use of the slide rule in a few hours. One must first learn to read with facility the logarithmic scales of the slide rule. The manipulation of the slide rule for each computation follows definite steps. These steps must be mastered through practice to make them automatic. This text is prepared with that end in mind. Though intended primarily for classroom instruction, the text can be used for individual instruction as well.

J.S.G.

W.W.G.

TABLE OF CONTENTS

Article	Page	Article	Page
1. Logarithmic scales	1	14. Square roots	16
2. The slide rule scale.....	1	15. The K scale.....	17
3. The first order figures.....	3	16. Cubes	17
4. The second order figures.....	3	17. Cube roots	18
5. The third order figures.....	5	18. The L scale	20
6. Products	6	19. Powers	20
7. Quotients	8	20. Roots	21
8. Combined products and quotients.....	9	21. The S scale.....	26
9. Proportions	12	22. Solution of the right triangle using sines...	28
10. The CI scale.....	14	23. The T scale.....	31
11. The ratio— $\frac{x}{a}$	15	24. Solution of the right triangle using tangents	33
12. The A and B scales.....	16	25. Solution of the oblique triangle using the law of sines.....	34
13. Squares	16	26. Solution of the oblique triangle using the law of cosines.....	35
		27. Solution of algebraic equations.....	37