

TABLE OF CONTENTS

	Page
Preface	v
Chapter I. Introduction.....	1
Chapter II. How to Hold the Slide Rule.....	7
Chapter III. The Scales of the Slide Rule.....	11
The C and D Scales.....	13
The CI Scale	23
The A and B Scales.....	24
The K Scale	26
The Sine Scale	28
The Tangent Scale	36
The Log Scale	38
Review Questions	42
Chapter IV. Multiplication.....	45
Digit Count. Locating the Decimal Point.....	50
Multiplication of Many Numbers by One Number.....	55
Multiplication of Three or More Numbers.....	57
Basis of the Process of Multiplication.....	60
Review Problems	65
Chapter V. Division.....	67
The Process of Division.....	67
Location of the Decimal Point in Division	70
Division of One Number by Many Numbers.....	73
Division of Many Numbers by one Number.....	74
Percentage Calculations	77
Division of One Number by the Product of Two Numbers.....	78
Location of Decimal Point.....	80
Basis of the Process of Division.....	82
Review Problems	85
Chapter VI. Combinations of Multiplication and Division.....	89
Location of the Decimal Point.....	94
Review Problems	107
Chapter VII. The Square and Square Root.....	109
The Square of a Number.....	109
Location of the Decimal Point.....	109
The Square Root of a Number.....	114
Location of the Decimal Point.....	115
Basis of the Process.....	118
Review Problems	121
Chapter VIII. The Cube and Cube Root.....	125
Part A—The Cube of a Number without the K Scale.....	125
Location of the Decimal Point.....	127
Basis of the Process of Finding the Cube.....	130
Part A—The Cube Root of a Number without the K Scale.....	130
Digits and Remainders.....	131
Location of the Decimal Point.....	139
Basis of the Process of Finding the Cube Root.....	142
Part B—The Cube of a Number with the K Scale.....	144
Part B—The Cube Root of a Number with the K Scale	146
Location of the Decimal Point.....	148
Basis of the Process.....	151
Review Problems	156

	Page
Chapter IX. Sines and Cosines.....	157
The Sine of an Angle.....	157
Basis of the Process.....	160
The Sine of a Very Small Angle.....	161
Basis of the Process.....	162
The Cosine of an Angle.....	163
The Sine of an Angle between 70° and 90°	164
The Sine of an Angle Greater than 90°	165
The Cosine of an Angle Greater than 90°	167
The Arc Sine of a Number	168
The Arc Sine of a Number less than 0.01.....	169
The Arc Cosine of a Number.....	170
The Arc Sine of a Number between 0.95 and 1.....	171
Basis of the Process.....	172
Review Problems	174
Chapter X. The Tangent of an Angle.....	177
Basis of the Process.....	179
The Tangent of a Very Small Angle.....	180
Basis of the Process.....	182
The Tangent of an Angle between 45° and $84^\circ 17'$	182
Basis of the Process.....	183
The Tangent of an Angle between $84^\circ 17'$ and 90°	183
Basis of the Process.....	184
The Tangent of an Angle Greater than 90°	184
The Arc Tangent of a Number between 0.1 and 1.....	186
The Arc Tangent of a Number between 1 and 10.....	187
The Arc Tangent of a Number Less than 0.1.....	188
The Arc Tangent of a Number Greater than 10.....	189
Review Problems	192
Chapter XI. The Log Scale.....	193
Logarithms to the Base 10.....	193
Basis of the Process.....	196
The Antilog for a Given Logarithm to the Base 10.....	198
Logarithms to the Base e	202
The Antilog for a Given Logarithm to the Base e	203
Review Problems	206
Chapter XII. The Reciprocal Scale.....	207
Multiplication with the CI Scale.....	208
Locating the Decimal Point.....	208
Basis of the Process.....	211
Division with the CI Scale.....	213
Location of the Decimal Point.....	214
Basis of the Process.....	217
Multiplication of Three Numbers.....	220
Locating the Decimal Point.....	221
Basis of the Process.....	224
Division of One Number by Two Other Numbers.....	224
Locating the Decimal Point.....	224
Basis of the Process.....	229
Review Problems	229
Chapter XIII. How to Check a Slide Rule.....	231
Chapter XIV. Final Suggestions.....	235
Summary of Rules	237
Negative Numbers	240
Appendix: Log Log (LL) Scale	243
Answers to Practice Problems	263
Index	271