

# **PRACTICAL METHODS IN ARITHMETIC**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649519484

Practical Methods in Arithmetic by R. S. Galer

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**R. S. GALER**

**PRACTICAL  
METHODS IN  
ARITHMETIC**



PRACTICAL METHODS

IN

ARITHMETIC

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BY

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SECOND EDITION, REVISED.

CHICAGO:  
A. FLANAGAN.  
1892.

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## PREFACE.

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This work is not designed to be a complete Arithmetic. In an experience of several years in teaching, the author was able by a little ingenuity to abridge mathematical calculations, and to perceive that many principles in Arithmetic have a general application. For these he has formulated rules which have at once the merit of brevity and scientific accuracy. Moreover these rules have as wide an application as the principles for which they stand, thus greatly simplifying arithmetical operations and reducing the number of rules to be committed to memory. In addition to this he has shortened the work required for many practical measurements.

The constant demand in the school room for these methods and formulas led the Author to believe they might be acceptable to a larger class of students and teachers than he could reach personally.

With this aim in view this little volume is published. It is not claimed that all of it is original. Much that was considered of value has been gathered from other sources. The Author has taken this step with the purpose of embodying the results of his own individual experience in a convenient form, and at the same time of furnishing a book of general value to pupils and teachers.

*PREFACE.*

Especial attention is called to the manner of treating Percentage and its numerous applications. This method is entirely original, and, it is believed, results in greatly simplifying these subjects.

With the hope that it may aid many in saving much time and labor, and stimulate them to think independently on practical subjects, this little volume is given to the public.

BLOOMFIELD, IOWA, JAN. 8th, 1889.

## TO THE STUDENT.

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The following general rules for work should be continually and faithfully observed :

I. Use the shortest method that is consistent with clearness and accuracy.

II. In multiplying, dividing, etc., contract wherever possible.

III. Burden the mind with few rules, but learn to apply these rules intelligently.

IV. Do not *guess* at methods in the solution of problems. Reason out each step, and have faith in the result.

V. Do as much work mentally as possible.

VI. Remember that *Rapidity* and *Accuracy* are the great aims.

VII. Bear in mind that nothing will take the place of *Reasoning* in mathematical work.