

**ROBINSON MATHEMATICAL
SERIES. KEY TO THE
PROGRESSIVE HIGHER
ARITHMETIC: FOR TEACHERS AND
PRIVATE LEARNERS**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649621842

Robinson Mathematical Series. Key to the Progressive Higher Arithmetic: For Teachers and Private Learners by Horatio N. Robinson

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd.
Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

HORATIO N. ROBINSON

**ROBINSON MATHEMATICAL
SERIES. KEY TO THE
PROGRESSIVE HIGHER
ARITHMETIC: FOR TEACHERS AND
PRIVATE LEARNERS**

ROBINSON'S MATHEMATICAL SERIES.

KEY

TO THE

PROGRESSIVE

HIGHER ARITHMETIC.

FOR TEACHERS AND PRIVATE LEARNERS.

NEW YORK ··· CINCINNATI ··· CHICAGO
AMERICAN BOOK COMPANY

1897 No. 907

MARVARD COLLEGE LIBRARY
GIFT OF THE
GRADUATE SCHOOL OF EDUCATION

1897 No. 907

Copyright, 1863 and 1892, by DANIEL W. FISH.

NEW YORK, N. Y.

W. P. 2

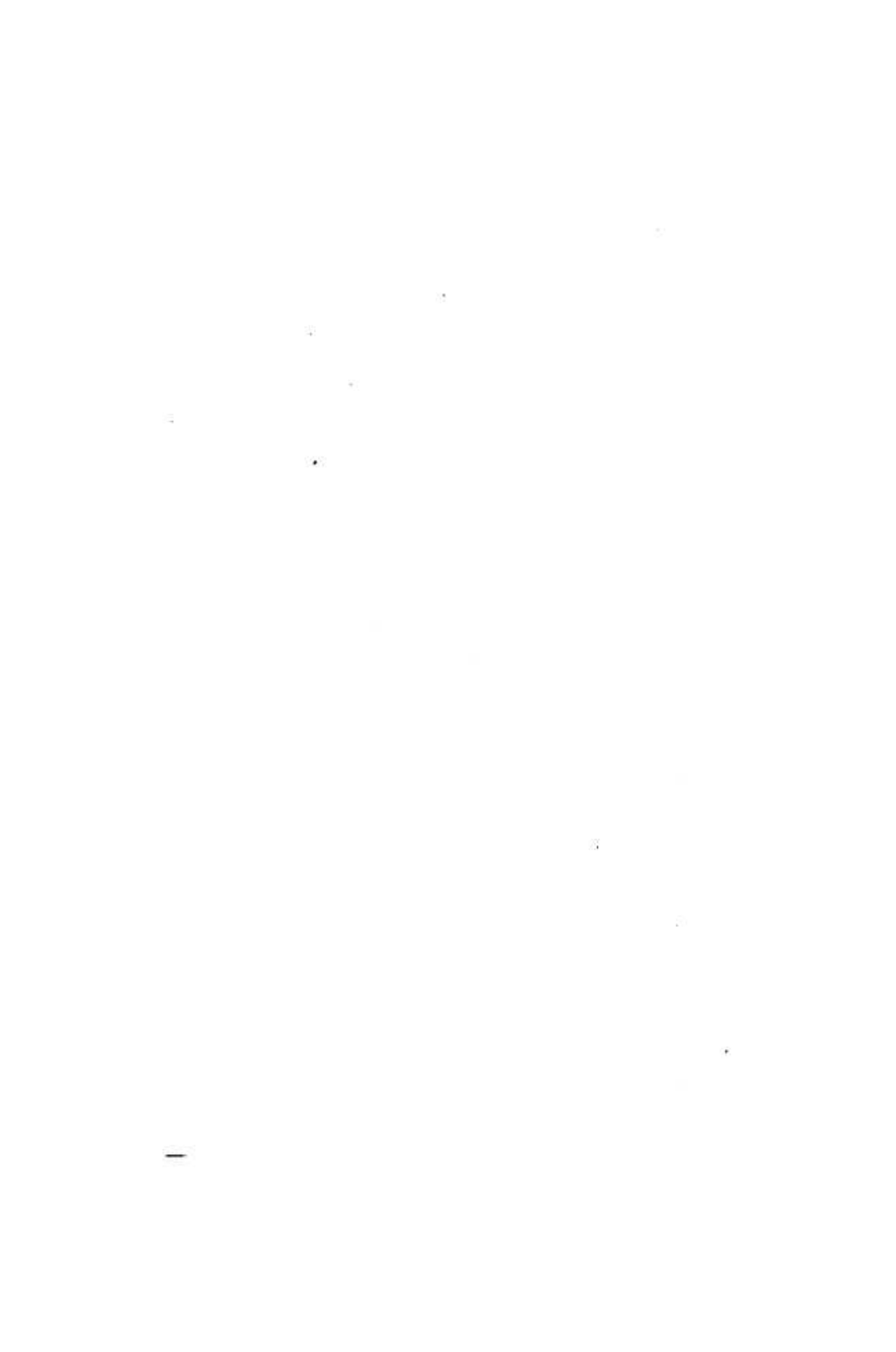
PROMINENT CHARACTERISTICS

or

ROBINSON'S MATHEMATICAL SERIES

The books of this Series, although many of them have so recently been published, have been recommended and adopted by hundreds of the most critical and successful teachers, for the following reasons :

1. For the *philosophical* and *scientific* arrangement of the subjects.
2. For the *conciseness* of the rules and the *brevity* and *accuracy* of the definitions.
3. For the *rigid* and *logical*, yet *full* and *comprehensive* Analysis.
4. For the *new*, *original*, and *improved* methods of operations, not found in most other works of the kind.
5. For the very large *number* and *variety* of *practical* examples—practical, because adapted to the ordinary transactions of business life.
6. For their *typographical* execution, *substantial binding*, and general *attractiveness*.
7. For the *easy gradation* and *progressiveness*, not only in the several *books* that compose the series, but in the arrangement and treatment of the *subjects* of each book.
8. For their *adaptation* to the various grades of scholarship in all our schools.
9. For the general *unity* of their plan, and the *clearness* and *perspicuity* of their style.
10. For *scientific accuracy*, combined with *practical utility*, throughout the whole.



K E Y .

ADDITION.

(67, page 25.)

Ex. 8	Ans. 1982738.	Ex. 4.	Ans. 435058.
Ex. 5.	Ans. 3189.	Ex. 6.	Ans. 289142.
Ex. 7.	Ans. 415184.	Ex. 12.	Ans. 3001623.
Ex. 13.	Ans. 16977.	Ex. 16.	Ans. 1881.
Ex. 17.	Ans. 6076510.	Ex. 20	Ans. 21184000
		Ex. 22.	Ans. \$1924950.

ADDING TWO OR MORE COLUMNS AT ONE OPERATION

(68, page 28.)

Ex. 5.	Number of churches,	35887;
	“ “ persons accommodated,	13847902;
	Value of church property,	\$85774659
Ex. 6.	Pounds of butter,	312625306;
	“ “ cheese,	105735893;
	“ “ wool,	52516961;
	Bushels of wheat,	100485844.

SUBTRACTION.

(75, page 31.)

Ex. 5	Ans. 174333815.	Ex. 6.	Ans. 2361650877.
Ex. 7	Ans. 86602389426.	Ex. 8.	Ans. 9000989311

(25-31)

- Ex. 10. *Ans.* 86 years. Ex. 13. *Ans.* \$44656518
 Ex. 15. *Ans.* 2121108 square miles; 316636286 population
 Ex. 20. *Ans.* 2657048.

TWO OR MORE SUBTRAHENDS.

(76, page 34.)

- | | |
|---|--|
| <p>Ex. 5. 4568</p> $\begin{array}{r} \\ \underline{1820} \\ 275 \\ \\ \underline{820} \\ 2653 \text{ Ans.} \end{array}$ | <p>Ex. 6. $4756+575+140+84=5555$</p> $\begin{array}{r} \\ \underline{1200} \\ 750 \\ \\ \underline{96} \\ 3509 \text{ Ans} \end{array}$ |
| <p>Ex. 7. \$15760</p> $\begin{array}{r} \\ \underline{2175} \\ 3794 \\ \\ \underline{4587} \\ \$5204 \text{ Ans.} \end{array}$ | <p>Ex. 8. \$75860</p> $\begin{array}{r} \\ \underline{45640} \\ 25175 \\ \\ \underline{} \\ \$5045 \text{ Ans} \end{array}$ |
| <p>Ex. 9. 20000</p> $\begin{array}{r} \\ \underline{11000} \\ 7000 \\ \\ \underline{} \\ \text{Ans. 2000 square miles.} \end{array}$ | <p>Ex. 10. 398470</p> $\begin{array}{r} \\ \underline{157548} \\ 143429 \\ \\ \underline{} \\ 97493 \text{ Ans} \end{array}$ |
| <p>Ex. 11 \$61807088</p> $\begin{array}{r} \\ \underline{52889800} \\ 234000 \\ \\ \underline{} \\ \$8233288 \text{ Ans.} \end{array}$ | <p>Ex. 12. $\\$5760+\\$3575=\\$9335$</p> $\begin{array}{r} \\ \underline{2746} \\ 4632 \\ \\ \underline{} \\ \$1957 \text{ Ans} \end{array}$ |

MULTIPLICATION.

7

Ex. 13. 643166

65088

114624

Ans. 468504

Ex. 14. \$8186798

5700814

904299

\$1582180 *Ans*

Ex. 15. \$12722470

7821556

424497

2355016

Ans. \$2121401

MULTIPLICATION.

(85, page 38.)

Ex. 7 *Ans.* 43506216.Ex. 8. *Ans.* 48288058.Ex. 16 *Ans.* 24500.Ex. 19. *Ans.* \$81647000Ex. 20. *Ans.* \$909000.

POWERS OF NUMBERS.

(91, page 39.)

Ex. 1. $72 \times 72 = 5184.$ Ex. 2. $12 \times 12 \times 12 \times 12 \times 12 = 248832.$ Ex. 3. $25 \times 25 \times 25 = 15625.$ Ex. 4. $7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 = 823543$ Ex. 5. $19 \times 19 \times 19 \times 19 = 130321.$ Ex. 6. $3 \times 3 \times 3 \times 3 \times 3 \times 3 = 729$

(34-40)