

**THE ALVORD AND DAVIS
DRILL AND PROBLEM
BOOK IN ARITHMETIC: FOR
FIFTH TO EIGHTH GRADES**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649044597

The Alvord and Davis Drill and Problem Book in Arithmetic: For Fifth to Eighth Grades by
Charles P. Alvord & Miss M. Elsie Davis

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

CHARLES P. ALVORD & MISS M. ELSIE DAVIS

**THE ALVORD AND DAVIS
DRILL AND PROBLEM
BOOK IN ARITHMETIC: FOR
FIFTH TO EIGHTH GRADES**

° THE
ALVORD AND DAVIS
Drill and Problem Book
in Arithmetic

FOR FIFTH TO EIGHTH GRADES

BY
CHARLES P. ALVORD
Supervisor of Grammar Grades
Buffalo, N. Y.

AND
MISS M. ELSIE DAVIS
Teacher of Arithmetic Methods
City Training School
Buffalo, N. Y.

H. E. REED, Publisher
Syracuse, N. Y.

Edgewood 119.14.135

HARVARD COLLEGE LIBRARY
GIFT OF THE
GRADUATE SCHOOL OF EDUCATION

Feb 21, 1929

COPYRIGHT, 1914
H. E. REED
Syracuse, N. Y.

THE MASON-HENRY PRESS
SYRACUSE AND NEW YORK

PREFACE

An efficient course of instruction in arithmetic has a three-fold purpose. First, it must teach the fundamental number combinations so thoroughly that pupils can state them automatically. Secondly, it must teach the abstract processes in arithmetic so well that pupils can perform them with absolute accuracy and practical rapidity. Thirdly, it must develop in pupils the power to reason and to apply their knowledge of number to practical concrete problems.

Skill in the facts and processes can be developed only by ceaseless, systematic drills, conducted to correspond to the practical manner in which they are used in every-day computation.

The further purpose—to solve problems—can be acquired only by a large amount of practice in actually solving problems.

This book has been prepared for the purpose of supplying a great number of abstract examples to be used in drill and an abundance of problems applying the facts and processes. These have been carefully graded. In the sets of miscellaneous problems a wide range of concrete conditions, all of which are within the comprehension of pupils, has been used. There is a sufficient variety in the expression of problems involving similar conditions so that, in most cases, pupils must reason each problem independently of others. Arithmetical puzzles have been avoided.

The work is arranged topically and the topics usually given in modern courses of study have been fully covered.

CONTENTS

	Page
Roman Notation and Numeration	1
Addition	2-10
Subtraction	11-12
Multiplication	13-17
Division	18-21
Problems in Fundamental Processes	22-25
Prime Factors	26
Greatest Common Divisor	26-27
Least Common Multiple	28-29
Cancellation	30-31
Fractions	32-54
Aliquot Parts	55-56
Decimals	57-72
Bills	73-74
Measurements	75-113
Percentage	114-128
Profit and Loss	129-132
Commission	133-136
Trade Discount	136-139
Insurance	140-143
Taxes	144-146
Duties or Customs	147-148
Interest	149-160
Stocks and Bonds	160-164
Ratio and Proportion	165-167
Evolution	168-171
Miscellaneous Problems	171-181
Tables of Denominate Numbers	182-184
Definitions	185-193
Examinations	194-200

**THE ALVORD AND DAVIS
DRILL AND PROBLEM BOOK**

ROMAN NOTATION AND NUMERATION

1. Write in Roman numerals 1, 2, 3, 4, 5, 6, 7, 8 and 9.

2. Express the following numbers in Roman notation: 11, 12, 13, 14, 15, 16, 17, 18, 19.

3. Using Roman numerals, express 10, 20, 30, 40, 50, 60, 70, 80 and 90.

4. Express in Roman notation: 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 2000 and 10,000.

5. Write in Arabic notation: L, I, M, V, D, X, VIII, C.

6. In the Roman notation show the effect of (a) repeating a letter; (b) placing a letter before another of greater value; (c) placing a letter after another of greater value; (d) placing a bar over a letter.

7. Write in Roman notation:

a. 28	e. 105	i. 506	m. 1912
b. 42	f. 189	j. 973	n. 2356
c. 56	g. 246	k. 1492	o. 5864
d. 97	h. 402	l. 1607	p. 10852

8. Express the following numbers of book chapters in Arabic notation.

a. XIV.	d. CXLIX.	g. CXXXVII.
b. XXVI.	e. CLXV.	h. XCIX.
c. LXXXIX.	f. CXCII.	i. XCXVIII.