EFFICIENCY ARITHMETIC: INTERMEDIATE, PP. 1-281

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CHARLES E. CHADSEY & JAMES H. SMITH

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EFFICIENCY ARITHMETIC

INTERMEDIATE

BY

CHARLES E. CHADSEY, PH. D.
SUPERINTENDENT OF SCHOOLS
DETROIT, MICH.

AND

JAMES H. SMITH, A. M.
INSTRUCTOR IN MATHEMATICS AND MANUAL TRAINING, SCHOOL OF EDUCATION, UNIVERSITY OF CHICAGO

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PREFACE

An arithmetic designed for pupils of the Fifth and Sixth Grades must combine drill upon fundamental operations, including decimals and common fractions, with as wide an application of these principles to the common experiences of life as possible. While the children in these grades are immature and have had very limited practical experiences, it is necessary to include simple examples drawn from real facts and from genuine business transactions. Wherever possible the applied problems are taken from the actual experiences of children themselves and in all cases the facts upon which the problems are based are accurate and of real informational value.

The fact that many pupils leave school at the end of the Sixth Grade to go to work, and that there is an increasing tendency to substitute junior high school courses, make the intermediate arithmetic a fundamentally important text book. If for an appreciable number of pupils the intermediate arithmetic offers the last formal training in mathematics, it is necessary so far as possible to include the arithmetical processes and topics used under ordinary conditions of life.

Attention is called to the psychological plan of this book, by which the previous knowledge of the child is utilized in introducing a new subject.

The development of the subject of decimals is based upon the knowledge of common fractions already secured. In this way teachers find little difficulty in developing a subject which not infrequently has caused mental confusion.

The fact that in the presentation of the subject of denominate numbers, the use of both decimals and common fractions in the solution of problems is emphasized, simplifies another subject often troublesome to children.

In a similar way the treatment of percentage is based upon the knowledge of decimals and common fractions and, while giving a practical elementary knowledge, is in no way beyond the understanding of the child.

In this book, as in the other books of the series, the idea of systematic, standardized drill is emphasized. The practice exercises in fractions presented in Chapter I, Part II, will prove of great value in developing a clear conception of simple fractions and ability to perform the fundamental operations in fractions with speed and accuracy.

In the preparation of this Arithmetic, the authors have had the efficient aid of Miss Myra Banks, of the Winnetka (Ill.) Public Schools, and of Miss Katherine L. McLaughlin, of the School of Education, University of Chicago; and they are also indebted to Miss Annie J. Robinson, Principal of Case-Woodland School, Cleveland, for valuable criticisms and suggestions.

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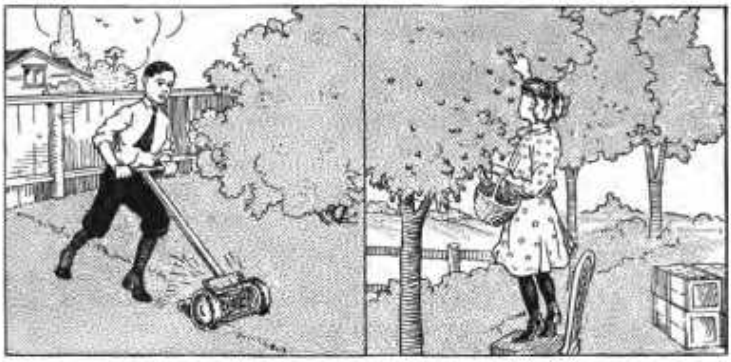
INTERMEDIATE ARITHMETIC

PART 1

CHAPTER I



Earning Money

Jane and Robert agreed to save at least half of what they earned during the summer vacation. They kept an account of what they earned in order to know how much they should put in the bank.

Exercise 1

1. During the 12 weeks of summer vacation, Jane earned 25 cents a week for drying the lunch dishes each day. How much did she earn from this source during vacation?

2. What did she earn at 10 cents a week for keeping the pansy bed weeded and the pansies picked?

3. She picked 16 quarts of cherries at 3 cents a quart from the trees in the back yard. What did she earn in this way?

4. She picked 24 quarts of strawberries at 2 cents and 6 quarts of red raspberries at 4 cents a quart. How much did she earn picking berries?