

**QUESTIONS AND
EXERCISES
IN ELEMENTARY
MATHEMATICS**

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Questions and Exercises in Elementary Mathematics by Palaestra Oxoniensis

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PALAESTRA OXONIENSIS

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MATHEMATICS**

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Mathematical

QUESTIONS AND EXERCISES

IN

ELEMENTARY MATHEMATICS

OXFORD

In the press.

ARITHMETIC FOR SCHOOLS. Based on principles of Cause and Effect. By the Rev. FREDERICK SPARKS, M.A., Mathematical Master, the High School, Plymouth, and late Lecturer of Worcester College, Oxford.

It may perhaps appear somewhat rash to add another to the many text books on Arithmetic already in use. It is believed, however, that the present work will be found to contain some features sufficiently distinctive and valuable to warrant its appearance.

The chief aim of the work is to place prominently before the learner the fact that the principle of 'cause and effect' is as applicable to Arithmetic as to other sciences, and that by working on this plan he may obtain his results in about half the time required by other methods. In each division of the subject this is shown by a typical example worked out in full, followed by ample exercises, with examination papers at regular intervals. The more complex parts of fractions and decimals are introduced later, so that the pupil may reach as early as possible the more interesting part of his work, the arithmetic of ordinary life. The so-called inverse rules are learnt at the same time as the 'direct rules,' and thus the difficulties of proportion wholly disappear. A careful selection of papers set by the Universities, Civil Service and Army Examination Boards, and other educational bodies, has been placed at the end of the volume.

JAMES THORNTON, High Street, Oxford.

QUESTIONS AND EXERCISES
IN
ELEMENTARY MATHEMATICS

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- (1) *ARITHMETIC*
(2) *ALGEBRA*
(3) *EUCLID*
-

ADAPTED TO
*MATRICULATION, RESPONSIONS, FIRST PUBLIC EXAMINATION,
AND THE OXFORD AND CAMBRIDGE LOCAL AND
CERTIFICATE EXAMINATIONS*

FOURTH EDITION

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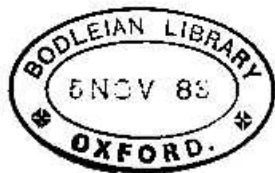
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PREFACE
TO
THE SECOND EDITION.

THE OBJECT of this volume is to furnish candidates for examination in Elementary Mathematics with examples for practice and test papers in Arithmetic and Algebra, and with suggestive questions in Euclid.

The First Edition was limited to the subjects required at Matriculation and in Responsions. The Second Edition has been extended so as to meet the requirements of the First Public Examination, and of the Oxford and Cambridge Local and Certificate Examinations. With this view new matter has been introduced, and, in order to avoid increasing the bulk of the volume, some of the easier Questions and earlier Examination Papers have been omitted.

All the Examination Papers in Arithmetic, except the last one, and those in Algebra I. to XXVIII, are substantially the same as papers which have been set in

Responsions. The remaining papers in Algebra, except the last one, are but slightly modified from papers set in Moderations.

The whole has been carefully revised, and the Answers have been verified.

In its present form the book will be found useful in preparation for any examination which includes the subjects of Arithmetic, Algebra to Quadratic Equations with Proportion, and Euclid Books I. to IV.

OXFORD: *June 1877.*

THIRD EDITION.

Five more papers in Algebra have been added, adapted to Moderations and the Certificate and Senior Local Examinations.

OXFORD: *November 1879.*

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