

**ELEMENTARY  
ALGEBRA: SECOND  
YEAR COURSE**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649570126

Elementary Algebra: Second Year Course by Florian Cajori & Letitia R. Odell

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Cover @ 2017

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**FLORIAN CAJORI & LETITIA R. ODELL**

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## ELEMENTARY ALGEBRA



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MACMILLAN & CO., LIMITED

LONDON · BOMBAY · CALCUTTA  
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JOHN WALLIS (1616-1703)

Professor at the University of Oxford. In 1685 he published a *Treatise of Algebra* which was the means of making the science of algebra more widely known in England.



# ELEMENTARY ALGEBRA

Second Year Course

BY

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NORTH SIDE HIGH SCHOOL, DENVER

New York

THE MACMILLAN COMPANY

1916

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Set up and electrotyped. Published July, 1916.

Norwood Press

J. S. Cushing Co. — Berwick & Smith Co.  
Norwood, Mass., U.S.A.

## PREFACE

THIS book contains a brief review of the fundamental operations of algebra followed by a thorough presentation of the topics usually included in the work of the third half year. The material is so arranged that the choice of topics for review or advance study may be easily made.

The book contains not only a large number of practical problems but also practical applications of graphs. Material for drill in the manipulation of exponents and radicals will be found in Chapter VII. Great pains have been taken to make the subject of logarithms accessible to beginners. The most difficult part in learning to compute with logarithms is the process of "interpolation." Of the various arrangements of logarithmic tables which have been suggested, we have selected the one which renders interpolation easiest. The chapter on logarithms is introduced earlier than usual, on account of the great practical importance of the subject. If desired, it can be taken up later, after Chapter VI. The concept of a *function* does not receive isolated and abstract treatment; it is presented as a fundamental idea in proportion, variation, and graphics. Its connection with problems of everyday life is firmly established.

The aims of the First Year Book have been kept in view in the preparation of this text. Emphasis is thrown upon clearness of exposition and the use of expressions which recall the axiomatic processes involved. Continued stress has been laid upon oral exercises.