ANALYTIC GEOMETRY

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ANALYTIC GEOMETRY

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PREFACE

THIS book is the result of several years of experience in teaching mathematics to students of engineering and science.

Since at the outset, analytic geometry opens to the student an entirely new method of approaching mathematical truth, much stress is placed on the first two chapters in which the student is building the concepts on which the future chapters rest. Emphasis has also been placed on those portions of analytic geometry in which experience has shown the student of calculus to be most frequently deficient. In this connection, in particular, polar coördinates have received more than usual attention and transcendental and parametric equations considerable space. The exercises are numerous and varied in character, and the teacher will thus be enabled to select from them those which best emphasize the points which he considers important.

The book has been used for two years in mimeographed form in the class room both by the authors and their colleagues, and many valuable suggestions arising from such use have been incorporated into the final form of the text.

The material is so arranged that the first ten chapters together with a portion of Chapter XIII include those subjects ordinarily offered to such freshman classes as cover in the first year the three subjects, college algebra, trigonometry and analytic geometry. The addition of Chapter XIV will round out a good course of five hours a week for a semester. The entire book should easily be covered in a three hour course throughout a year.

The authors take pleasure in expressing their thanks to their colleagues in the department of mathematics of the Iowa State College, for their assistance in reading proof and solving problems as well as for their many helpful suggestions.

MARIA M. ROBERTS,
JULIA T. COLPITTS.

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