

First Year Calculus as Taught by R. L. Moore
An Inquiry-Based Learning Approach
\$40.

Dorrance Publishing Company
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This book is called An Inquiry Based Learning Approach because it progresses through the topics of calculus by the method of "questions and answers," and it is in the style of the Moore Method, named for R. L. Moore. Dr. Moore was a mathematics professor who taught at the University of Texas at Austin for fifty years. His calculus, and advanced mathematics courses, were all student-lead, problem-solving classes.

Part of his success came from his genius for selecting the right kind of questions to ask and the right kind of problems to pose. Dr. Moore did not use any textbook in his classes, but modern practitioners of "the Moore Method", or some modification of the Moore Method, often do use textbooks to furnish their students with definitions and problems sets. The Modified Moore Method still retains the technique of having students teach students in the presence of the teacher.

Many of Dr. Moore's students, who have gone on to become professors of mathematics in universities and colleges, apply various versions of the Moore Method in their own classes. These professors and their colleagues and students and their students attend the Legacy of R.L. Moore conferences which meet each year to compare techniques and communicate about their teaching methods based upon the Moore Method. An organization that has grown out of these meetings is called the Educational Advancement Foundation (EAF). The various methods discussed are called, collectively, "Inquiry-Based Learning" (IBL). This textbook is designed for any teacher who is interested in teaching calculus with a strong student-centered approach. A teacher using this text must be willing to become an "interested bystander" while the student is the one who presents solutions at the board. See the sample pages.