Squaring the Circle: Geometry in Art and Architecture

Paul Calter

**DESCRIPTION**

Geometry is a dynamic branch of mathematics that also serves as a creative tool for engineers, artists, and architects. *Squaring the Circle: Geometry in Art and Architecture* includes all the topics necessary for a solid foundation in geometry and explores the timeless influence of geometry on art and architecture. The text offers wide-ranging exercise sets and related projects that allow students to practice and master the mathematics presented. Each chapter introduces mathematical concepts geometrically and illustrates their nontraditional applications in art and architecture throughout the centuries. Appropriate for both basic mathematics courses and cross-discipline courses in mathematics and art, *Squaring the Circle* requires no previous mathematics.

**ABOUT THE AUTHOR**

Paul A. Calter is a Visiting Scholar at Dartmouth College and Professor Emeritus of Mathematics at Vermont Technical College. He is a book review editor of the *Nexus Network Journal* and has interests in both the fields of mathematics and art. He received his B.S. from Cooper Union and his M.S. from Columbia University, both in engineering, and his Masters of Fine Arts Degree from Norwich University. Calter has taught mathematics for over twenty-five years and is the author of ten mathematics textbooks and a mystery novel. He has been an active painter and sculptor since 1968, has had many solo shows and participated in dozens of group art shows, and has permanent outdoor sculptures at a number of locations. Calter developed a course called "Geometry in Art & Architecture," which he has taught at Dartmouth College and Vermont Technical College, and he has taught at Dartmouth
College and Vermont Technical College, and he has given workshops and lectures on the subject. Calter's own art is concerned with astronomical and geometric themes; he searches for a link between the organic and geometric basis of beauty, what has been called the *philosopher's stone of aesthetics*.