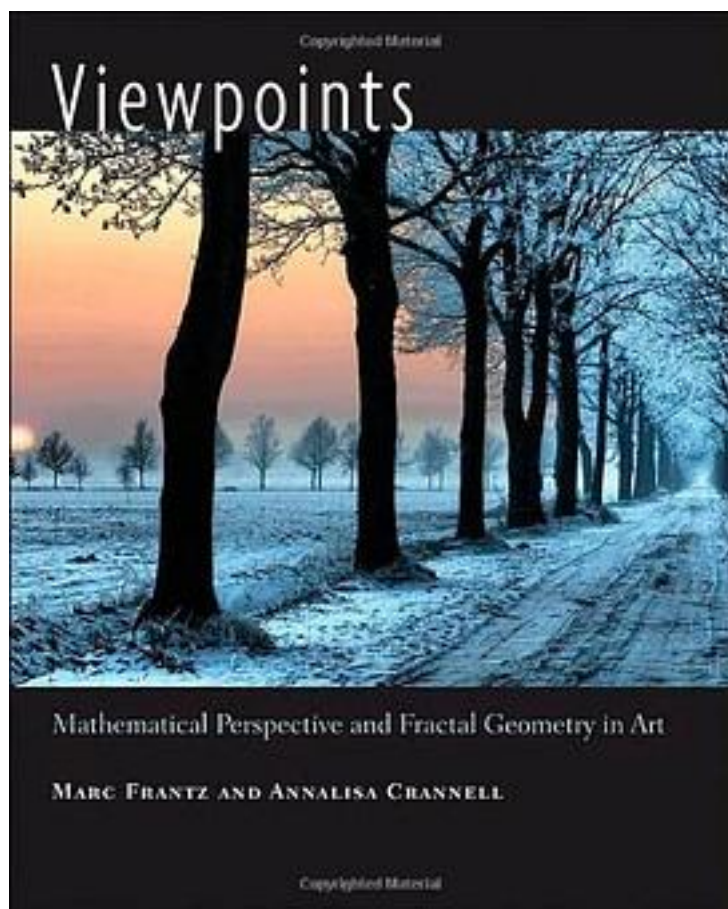


# Viewpoints



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An undergraduate textbook devoted exclusively to relationships between mathematics and art, Viewpoints is ideally suited for math-for-liberal-arts courses and mathematics courses for fine arts majors. The textbook contains a wide variety of classroom-tested activities and problems, a series of essays by contemporary artists written especially

for the book, and a plethora of pedagogical and learning opportunities for instructors and students. "Viewpoints" focuses on two mathematical areas: perspective related to drawing man-made forms and fractal geometry related to drawing natural forms. Investigating facets of the three-dimensional world in order to understand mathematical concepts behind the art, the textbook explores art topics including comic, anamorphic, and classical art, as well as photography, while presenting such mathematical ideas as proportion, ratio, self-similarity, exponents, and logarithms. Straightforward problems and rewarding solutions empower students to make accurate, sophisticated drawings. Personal essays and short biographies by contemporary artists are interspersed between chapters and are accompanied by images of their work. These fine artists - who include mathematicians and scientists - examine how mathematics influences their art. Accessible to students of all levels, "Viewpoints" encourages experimentation and collaboration, and captures the essence of artistic and mathematical creation and discovery. It is classroom-tested activities and problem solving. It includes accessible problems that move beyond regular art school curriculum. It contains multiple solutions of varying difficulty and applicability. Appropriate for students of all mathematics and art levels. It is original and exclusive essays by contemporary artists. Forthcoming: Instructor's manual (available only to teachers).

作者介绍:

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