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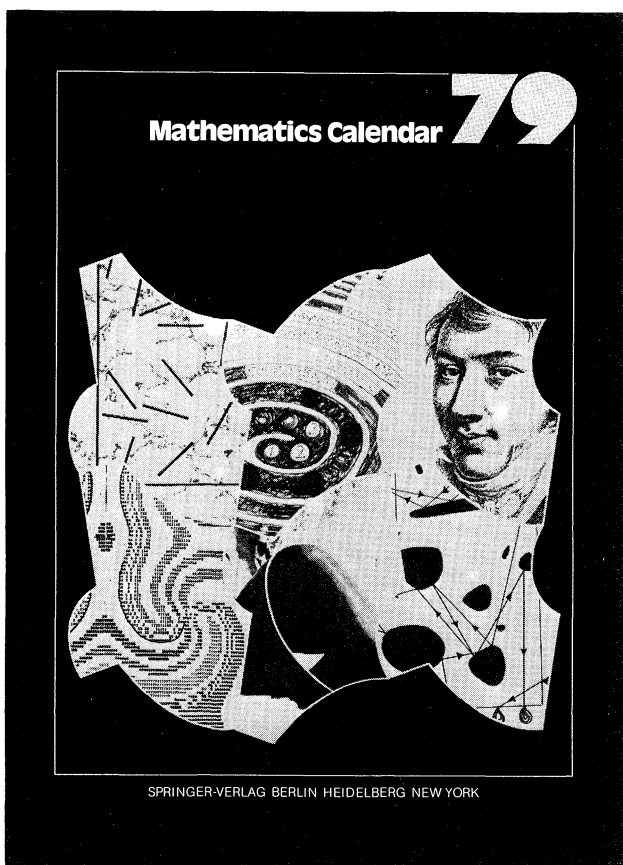
## Mathematics Calendar 79

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Mathematics Calendar

79

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### Contents:

**Sinai's Billiard** describes a mathematical object corresponding to a simplified gas

**Cuts and Congruence** challenges you to bisect given shapes into congruent halves

**Turning a Sphere Inside Out** by a motion creating neither holes nor creases (in color)

**Roots of Complex Analysis** – Gauss, Cauchy, Weierstrass, Riemann

**Arithmetic Progressions** links combinatorics and ergodic theory

**endless ribbon** – an artist's intriguing description of his personal discovery of the Möbius strip

**Connelly's Flexing Sphere** – a counterexample to the rigidity

conjecture for polyhedra (in color)

**Calculating a Breathtaking Surface** – a stochastic method for calculating the surface area of lung alveoli

**Rotating Reactions** in chemical and electrical activity are visualized by a computer printout (in color)

**Tiling the Plane** describes the Regular Tiling Problem and its solution

**Dimensions and Fractals** – pathological curves and other monsters

**Early Algebra** – Omar Khayyām's significance to mathematics

Seven of these themes are represented in the cover illustration of the calendar (above).