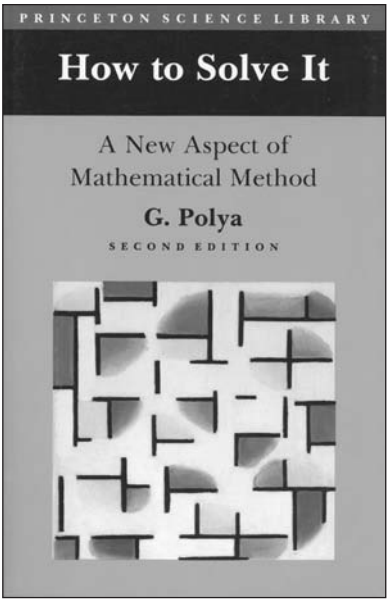

How to Solve It: A New Aspect of Mathematical Method

1945

(Click here to view our web site description.)

George Pólya

In this best-selling classic, George Pólya revealed how the mathematical method of demonstrating a proof or finding an unknown can be of help in attacking any problem that can be "reasoned" out—from building a bridge to winning a game of anagrams. Generations of readers have relished Pólya's deft instructions on stripping away irrelevancies and going straight to the heart of a problem. *How to Solve It* popularized heuristics, the art and science of discovery and invention. It has been in print continuously since 1945 and has been translated into twenty-three different languages.

Pólya was one of the most influential mathematicians of the twentieth century. He made important contributions to a great variety of mathematical research: from complex analysis to mathematical physics, number theory, probability, geometry, astronomy, and combinatorics. He was also an extraordinary teacher—he taught until he was ninety—and maintained a strong interest in pedagogical matters throughout his long career. In addition to *How to Solve It*, he published a two-volume work on the topic of problem solving, *Mathematics of Plausible Reasoning*, also with Princeton.

Pólya is one of the most frequently quoted mathematicians, and the following statements from *How to Solve It* make clear why: "My method to overcome a difficulty is to go around it." "Geometry is the science of correct reasoning on incorrect figures." "In order to solve this differential equation you look at it till a solution occurs to you."