Praise for Love and Math

"[Frenkel's] winsome new memoir... is three things: a Platonic love letter to mathematics; an attempt to give the layman some idea of its most magnificent drama-in-progress; and an autobiographical account, by turns inspiring and droll, of how the author himself came to be a leading player in that drama.

The conviction that mathematics has a reality that transcends the human mind is not uncommon among its practitioners, especially great ones like Frenkel and Langlands, Sir Roger Penrose and Kurt Gödel. It derives from the way that strange patterns and correspondences unexpectedly emerge, hinting at something hidden and mysterious."

-Jim Holt, The New York Review of Books

"With every page, I found my mind's eye conjuring up a fictional image of the book's author, writing by candlelight in the depths of the Siberian winter like Omar Sharif's Doctor Zhivago in the David Lean movie adaptation of Pasternak's famous novel. Love and Math is Edward Frenkel's Lara poems... As is true for all the great Russian novels, you will find in Frenkel's tale that one person's individual story of love and overcoming adversity provides both a penetrating lens on society and a revealing mirror into the human mind."

-Keith Devlin, Huffington Post

"Frenkel writes that math 'directs the flow of the universe.' It's as elegant as music and as much a part of our intellectual heritage as literature. He strives to awaken our wonder by taking us on [a] tour of his research, in which he reveals a 'hidden' world few of us encountered in school... Frenkel aims to make it understandable, even beautiful."

—The New York Times Book Review

"The words love and math aren't usually uttered in the same breath. But mathematician Edward Frenkel is on a mission to change that... [in his] book, 'Love and Math' [in which] the tenured professor at the University of California at Berkeley argues that the boring way that math is traditionally taught in schools has led to a widespread ignorance that may have even been responsible for the recession... [the] book tells his personal story and goes on to describe his research in the Langlands program, as well as recent mathematical discoveries that aren't regularly taught in classrooms."

—The Wall Street Journal

"The story of [Frenkel's] professional triumph against heavy odds is deeply satisfying... But his true answer to the bigotry he encountered in his youth lies in his passion for mathematics – the 'love' of the book's title... Believing that mathematics is a common human possession, he explains each concept in nontechnical terms, relying heavily on analogies from daily life... lay readers... will gain an understanding of what modern mathematics is about – its ambition, its beauty and its power to enthrall."

—The New York Times

"Two fascinating narratives are interwoven in *Love and Math*, one mathematical, the other personal... Frenkel deftly takes the reader... to the far reaches of our current understanding. He seeks to lay bare the beauty of mathematics for everyone. As he writes, 'There is nothing in this world that is so deep and exquisite and yet so readily available to all.'"

-Nature

"Frenkel has done an extraordinary job of making his case for love and mathematics. I think a lot of nonmathematicians will gain appreciation for the field, in the way that Stephen Hawking's *A Brief History of Time* delivered cutting-edge cosmology to the masses. It's not just the clarity of the thought or the skillful writing; in both cases, one of the best practitioners in the world has opened himself up personally to communicate deep ideas."

-Wilmott

"Part ode, part autobiography, *Love and Math* is an admirable attempt to lay bare the beauty of numbers for all to see."

-Scientific American

"Edward Frenkel mounts a passionate case against math's reputation as an arcane and boring field [and] argues for math's beauty and relevance."

-Page-Turner blog, The New Yorker

"Frenkel pares the technical details to a minimum as he reflects on the platonic transcendence of mathematical concepts and marvels at their mysterious utility in explaining physical phenomena. Not merely dry formulas in textbooks, the math Frenkel celebrates fosters freedom and, yes, even distills the essence of love. A breathtaking personal and intellectual odyssey."

-Booklist

"Fascinating... By using analogies, [Frenkel] describes concepts such as symmetries, dimensions, and Riemann surfaces in a way that will enable non-mathematicians to understand them. Whether or not readers develop a love for math, they will get a glimpse of the love that Frenkel has for the subject. Recommended for all readers, math whizzes or not, inclined to be interested in the subject."

—Library Journal

"Frenkel reveals the joy of pure intellectual discovery in this autobiographical story of determination, passion, and the Langlands program... Frenkel's gusto will draw readers into his own quest, pursuing the deepest realities of mathematics as if it were 'a giant jigsaw puzzle, in which no one knows what the final image is going to look like.'

-Publishers Weekly

"A fascinating peek into the author's life and work."

-Kirkus Reviews

"Edward Frenkel's riveting new book made this former math phobe fall for a subject I thought I hated. He worships math with a passion so contagious, you'll be swept away – by both the subject and Frenkel's remarkable journey. When the USSR tried to block him from university based on his Jewish surname, he literally scaled twenty-foot fences to steal into classes. Before age 21, a letter from Harvard invited him to teach, launching a career that includes writing and starring in an erotic film paying homage to Yukio Mishima, *Rites of Love and Math*. Frenkel's charisma is undeniable. Not since G.H. Hardy's *Mathematician's Apology* has one of the field's finest minds clarified the metaphysical beauty of this misunderstood field of inquiry. This book is not just a love song for a subject and a battle cry for educational reform, it's literary pleasure at its freshest."

—Mary Karr, bestselling author of *The Liars' Club*, *Cherry*, and *Lit*

"Love and Math = fast-paced adventure story + intimate memoir + insider's account of the quest to decode a Rosetta Stone at the heart of modern math. It all adds up to a thrilling intellectual ride – and a tale of surprising passion."

—Steven Strogatz, Professor of Applied Mathematics, Cornell University, and author of *The Joy of x*

"I don't know if I've ever used the words love and math together, but this book changed that. Edward Frenkel writes of the objective beauty of numbers. Like musical notes, they exist apart from the mind, daring us to fathom their depths and assemble them in arcane narratives that tell the story of us. Reading this book, one is compelled to drop everything and give math another try; to partake of the ultimate mystery."

-Chris Carter, creator of The X-Files

"This very readable, passionately written, account of some of the most exciting ideas in modern mathematics is highly recommended to all who are curious lovers of beauty."

-David Gross, Nobel Laureate in Physics

"A marvelous and arresting account of the struggles, the joys, the passions of a mathematician. In this thrilling account of how Frenkel overcame the bleak anti-Semitism in his early schooling in Moscow to contribute to the grand goals of his subject, he makes the palette of mathematical ideas vivid to us by calling upon things as diverse as his mother's recipe for borscht (to explain the flavor of quantum duality) and imagined screenplays (to offer hints of the Langlands Program)."

—Barry Mazur, University Professor, Harvard University, and author of *Imagining Numbers*

"While you might think of Edward Frenkel as that mathematician who made that erotic film about math, actually you should know him as the guy who's going to help you see through your anxieties and perceive your world more deeply. *Love and Math* is an autobiography, a portal to understanding previously fearsome math, and the first popular account of the Langlands Program, which is one of the central creative projects of humanity at this time. This book is about knowing reality as fundamentally as possible on every level."

—Jaron Lanier, author of You Are Not a Gadget and Who Owns the Future?

"Through his fascinating autobiography, mathematician Edward Frenkel is opening for us a window into the ambitious Langlands Program – a sweeping network that interconnects many branches of mathematics and physics. A breathtaking view of modern mathematics."

—Mario Livio, astrophysicist, and author of *The Golden Ratio* and *Brilliant Blunders*