Fermat's Enigma, by Simon Singh

This book traces the history of what has been known as Fermat's Last Theorem as well as some of the history of mathematics surrounding this problem. Fermat conjectured that the equation $x^n + y^n = z^n$ has integer solutions for x, y, z only when $n = 1$ or $n = 2$. For all other values of n there are no integers x, y, z satisfying the equation. What has intrigued and frustrated mathematicians is that Fermat claimed he had an elegant proof of this result, but the margin of his book was too small to hold it. This book can be read and enjoyed by readers with little or no mathematical background.

Fermat's conjecture attracted the attention of professional mathematicians as well as recreational mathematicians for over 350 years and its proof caused mixed emotions among those who sought to find a proof themselves. To quote Singh (page 284):

> *Wiles realizes that in order to give mathematics one of its greatest proofs, he has had to deprive it of its greatest riddle: "People have told me that I've taken away their problem, and asked if I could give them something else. There is a sense of melancholy. We lost something that's been with us for so long, and something that drew a lot of us into mathematics. Perhaps that's always the way with math problems. We just have to find new ones to capture our attention."*

Reviewed by Bill Richardson