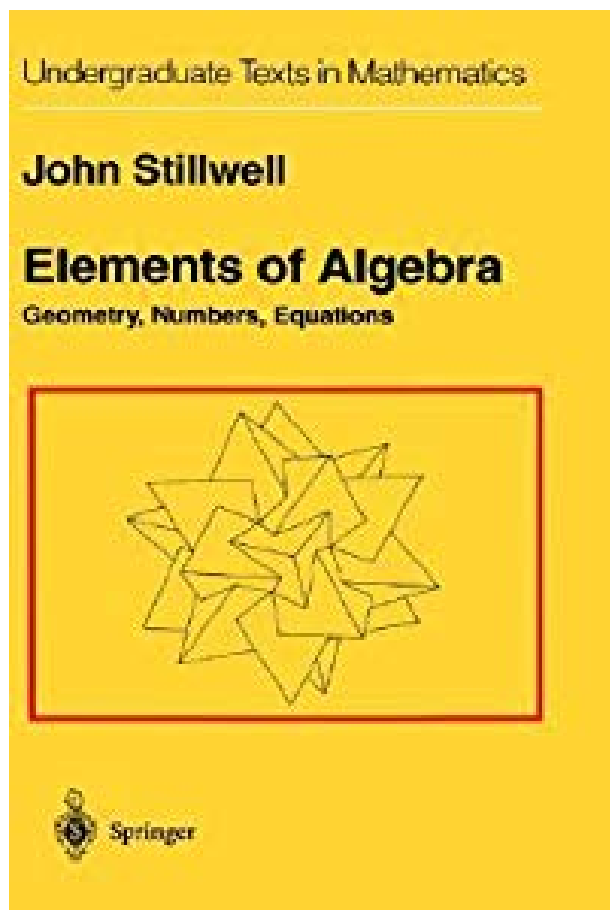


# Elements of Algebra: Geometry, Numbers, Equations



<b>Author:</b>	John Stillwell
<b>ISBN10:</b>	0387942904
<b>Goodreads Rating:</b>	4.45
<b>Published:</b>	July 20th 2001 by Springer
<b>Genre:</b>	Science
<b>ISBN13:</b>	9780387942902
<b>Language</b>	English
<b>Pages:</b>	184

[Elements of Algebra: Geometry, Numbers, Equations.pdf](#)

[Elements of Algebra: Geometry, Numbers, Equations.epub](#)

This book is a concise, self-contained introduction to abstract algebra that stresses its unifying role in geometry and number theory. Classical results in these fields, such as the straightedge-and-compass constructions and their relation to Fermat primes, are used to motivate and illustrate algebraic techniques. Classical algebra itself is used to motivate the problem of solvability by radicals and its solution via Galois theory.

This historical approach has at least two advantages: On the one hand it shows that abstract concepts have concrete roots, and on the other it demonstrates the power of new concepts to solve old problems. Algebra has a pedigree stretching back at least as far as Euclid, but today its connections with other parts of mathematics are often neglected or forgotten. By developing algebra out of classical number theory and geometry and reviving these connections, the author has made this book useful to beginners and experts alike. The lively style and clear exposition make it a pleasure to read and to learn from.