

METADATA Title: Basic Galois Theory

Other Titles: An Introduction to Symmetry, Orbits, and Fields

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Abstract

This book explores Galois theory through the lens of group action on sets. This particular approach clarifies the core concepts and findings of Galois theory. Using Galois theory, the book interprets the formulas that solve quadratic, cubic, and quartic polynomials. It also elucidates why similar formulas are unattainable for polynomials of degrees greater than four. Additionally, considerable emphasis is placed on computing the Galois group of a polynomial, determining fixed subfields, and identifying minimal polynomials.



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