

1. Record Nr.	UNINA9910785320203321
Autore	Bezout Etienne <1730-1783.>
Titolo	General theory of algebraic equations [[electronic resource] /] / Etienne Bezout ; translated by Eric Feron
Pubbl/distr/stampa	Princeton, : Princeton University Press, c2006
ISBN	1-282-93542-9 9786612935428 1-4008-2696-9
Edizione	[Core Textbook]
Descrizione fisica	1 online resource (362 p.)
Classificazione	SK 230
Altri autori (Persone)	FeronEric <1967->
Disciplina	512.9/4
Soggetti	Equations, Theory of Mathematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Front matter -- Contents -- Translator's Foreword -- Dedication from the 1779 edition -- Preface to the 1779 edition -- Introduction -- Book One -- Book Two
Sommario/riassunto	This book provides the first English translation of Bezout's masterpiece, the General Theory of Algebraic Equations. It follows, by almost two hundred years, the English translation of his famous mathematics textbooks. Here, Bézout presents his approach to solving systems of polynomial equations in several variables and in great detail. He introduces the revolutionary notion of the "polynomial multiplier," which greatly simplifies the problem of variable elimination by reducing it to a system of linear equations. The major result presented in this work, now known as "Bézout's theorem," is stated as follows: "The degree of the final equation resulting from an arbitrary number of complete equations containing the same number of unknowns and with arbitrary degrees is equal to the product of the exponents of the degrees of these equations." The book offers large numbers of results and insights about conditions for polynomials to share a common factor, or to share a common root. It also provides a state-of-the-art analysis of the theories of integration and differentiation of functions in the late eighteenth century, as well as one of the first uses of

determinants to solve systems of linear equations. Polynomial multiplier methods have become, today, one of the most promising approaches to solving complex systems of polynomial equations or inequalities, and this translation offers a valuable historic perspective on this active research field.
