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Nota di contenuto	1. A gallery of algebraic curves -- 2. Points at infinity -- 3. From real to complex -- 4. Topology of algebraic curves in $P^2(C)$ -- 5. Singularities -- 6. The big three: C, K, S.
Sommario/riassunto	This book can be used in a one semester undergraduate course or senior capstone course, or as a useful companion in studying algebraic geometry at the graduate level. This Guide is a friendly introduction to plane algebraic curves. It emphasizes geometry and intuition, and the presentation is kept concrete. You'll find an abundance of pictures and examples to help develop your intuition about the subject, which is so basic to understanding and asking fruitful questions. Highlights of the elementary theory are covered, which for some could be an end in itself, and for others an invitation to investigate further. Proofs, when given, are mostly sketched, some in more detail, but typically with less. References to texts that provide further discussion are often included. Computer algebra software has made getting around in algebraic geometry much easier. Algebraic curves and geometry are now being applied to areas such as cryptography, complexity and coding theory, robotics, biological networks, and coupled dynamical systems. Algebraic curves were used in Andrew Wiles' proof of Fermat's Last Theorem, and to understand string theory, you need to know some

algebraic geometry. There are other areas on the horizon for which the concepts and tools of algebraic curves and geometry hold tantalizing promise. This introduction to algebraic curves will be appropriate for a wide segment of scientists and engineers wanting an entrance to this burgeoning subject.
