Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics)

Joseph H. Silverman, John T. Tate

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics)

Joseph H. Silverman, John T. Tate

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) Joseph H. Silverman, John T. Tate

The theory of elliptic curves involves a pleasing blend of algebra, geometry, analysis, and number theory. This volume stresses this interplay as it develops the basic theory, thereby providing an opportunity for advanced undergraduates to appreciate the unity of modern mathematics. At the same time, every effort has been made to use only methods and results commonly included in the undergraduate curriculum. This accessibility, the informal writing style, and a wealth of exercises make *Rational Points on Elliptic Curves* an ideal introduction for students at all levels who are interested in learning about Diophantine equations and arithmetic geometry.

Most concretely, an elliptic curve is the set of zeroes of a cubic polynomial in two variables. If the polynomial has rational coefficients, then one can ask for a description of those zeroes whose coordinates are either integers or rational numbers. It is this number theoretic question that is the main subject of *Rational Points on Elliptic Curves*. Topics covered include the geometry and group structure of elliptic curves, the Nagell–Lutz theorem describing points of finite order, the Mordell–Weil theorem on the finite generation of the group of rational points, the Thue–Siegel theorem on the finiteness of the set of integer points, theorems on counting points with coordinates in finite fields, Lenstra's elliptic curve factorization algorithm, and a discussion of complex multiplication and the Galois representations associated to torsion points. Additional topics new to the second edition include an introduction to elliptic curve cryptography and a brief discussion of the stunning proof of Fermat's Last Theorem by Wiles et al. via the use of elliptic curves.

Download and Read Free Online Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) Joseph H. Silverman, John T. Tate

Download and Read Free Online Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) Joseph H. Silverman, John T. Tate

---

From reader reviews:

Irma Kellner:

A lot of people always spent their own free time to vacation or perhaps go to the outside with them friends and family or their friend. Do you realize? Many a lot of people spent they free time just watching TV, or playing video games all day long. If you need to try to find a new activity honestly, that is look different you can read a book. It is really fun for you. If you enjoy the book that you simply read you can spent the entire day to reading a reserve. The book Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) it is extremely good to read. There are a lot of folks that recommended this book. These people were enjoying reading this book. Should you did not have enough space to create this book you can buy typically the e-book. You can m0ore simply to read this book from the smart phone. The price is not to fund but this book provides high quality.

Sam Current:

Reading a book to be new life style in this calendar year; every people loves to study a book. When you examine a book you can get a great deal of benefit. When you read textbooks, you can improve your knowledge, since book has a lot of information on it. The information that you will get depend on what kinds of book that you have read. If you would like get information about your research, you can read education books, but if you act like you want to entertain yourself you can read a fiction books, this kind of us novel, comics, in addition to soon. The Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) offer you a new experience in examining a book.

Lavone Anderson:

What is your hobby? Have you heard which question when you got learners? We believe that that issue was given by teacher with their students. Many kinds of hobby, Everybody has different hobby. And you also know that little person including reading or as looking at become their hobby. You need to understand that reading is very important as well as book as to be the point. Book is important thing to provide you knowledge, except your own teacher or lecturer. You will find good news or update about something by book. A substantial number of sorts of books that can you choose to use be your object. One of them is actually Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics).

Doris Stone:

Many people said that they feel fed up when they reading a e-book. They are directly felt it when they get a half areas of the book. You can choose the actual book Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) to make your own reading is interesting. Your current skill of reading ability is developing when you such as reading. Try to choose easy book to make you enjoy you just read it and mingle the feeling about book and reading especially. It is to be initially opinion for you to like to start a book and learn it. Beside that the reserve Rational Points on Elliptic Curves (Undergraduate Texts in

Mathematics) can to be your brand-new friend when you're sense alone and confuse with what must you're doing of the time.

Download and Read Online Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) Joseph H. Silverman, John T. Tate #VJ4KUONTWC2

Read Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate for online ebook

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate books to read online.

Online Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate ebook PDF download

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate Doc

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate Mobipocket

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate EPub

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate Ebook online

Rational Points on Elliptic Curves (Undergraduate Texts in Mathematics) by Joseph H. Silverman, John T. Tate Ebook PDF