An introduction to number theory and Diophantine equations: Bibliography

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There are many good books for people interested in number theory. Here are a few of my favorites. For more information on the specific focus of our course, binary quadratic forms, try

- *My Numbers, My Friends* by Paulo Ribenboim (Chapter 6)

- *Introduction to Number Theory* by Hua Loo Keng (Chapter 12)

Ribenboim's book gives a beautiful introduction to the theory, and also describes many open conjectures about class numbers. The book by Hua in particular gives a good derivation of the conditions we used to define genera of quadratic forms.

For more about elementary number theory in general, try

- *An Introduction to the Theory of Numbers* by Hardy and Wright.

This is a historic book that has hundreds of interesting facts (and proofs) from elementary number theory. It is organized in short sections, so it is an easy book to browse.

For a nice historical approach to number theory, take a look at

- *The Queen of Mathematics,* by Jay R. Goldman.

And if you learn better by solving problems (actually, everyone does!), this next one is a great book that teaches number theory as a sequence of exercises (and, don't worry, eventually also gives the solutions to those exercises):

- *A pathway into number theory,* by R. P. Burn.

This is a great book to read if you are trying to teach yourself number theory! Finally, if you want to see how Gauss did it in 1801, there is:

- *Disquisitiones Arithmeticae,* by C. F. Gauss, translated from Latin into English by Arthur A. Clarke, Yale University Press 1966.