Number theorists want to know why numbers do what they do, and they will apply any area of mathematics – algebra, complex variables, anything useful, to find out.
Underwood Dudley

Below are books on several topics in number theory. Those marked "advanced" will not be accessible to you without more preparation (e.g., Serre's book on local fields requires a good background in commutative algebra and Silverman's book on elliptic curves is best read after learning basic algebraic geometry). One general aspect to be aware of is that number theory makes use of a lot of the rest of mathematics: abstract algebra, real and complex analysis, commutative algebra, algebraic geometry, and topology are all relevant for a student interested in number theory.

<u>Algebraic Number Theory</u>
J. W. S. Cassels and A. Fröhlich, "Algebraic Number Theory." (advanced)
K. Ireland and M. Rosen, "A Classical Introduction to Modern Number Theory."
S. Lang, "Algebraic Number Theory." (advanced)
D. Marcus, "Number Fields."
P. Samuel, "Algebraic Theory of Numbers."

<u>p-adic Numbers</u>
J. W. S. Cassels, "Local Fields."
F. Gouvea, "p-adic Numbers: An Introduction."
N. Koblitz, "p-adic Numbers, p-adic Analysis, and Zeta-Functions."
J-P. Serre, "Local Fields." (advanced)

<u>Elliptic Curves</u>
A. Knapp, "Elliptic Curves."
J. Silverman and J. Tate, "Rational Points on Elliptic Curves."
J. Silverman, "The Arithmetic of Elliptic Curves." (advanced)

<u>Analytic Number Theory</u>
H. Davenport, "Multiplicative Number Theory."
H. Iwaniec and E. Kowalski, "Analytic Number Theory." (advanced)
J. Stopple, "A Primer of Analytic Number Theory: From Pythagoras to Riemann."

<u>Miscellaneous</u>
W. A. Coppel, "Number Theory: An Introduction to Mathematics."
J. R. Goldman, "Number Theory: The Queen of Mathematics."
F. Lemmermeyer, "Reciprocity Laws: From Euler to Eisenstein."
W. J. LeVeque, "Fundamentals of Number Theory."
Y. I. Manin and A. A. Panchishkin, "Introduction to Modern Number Theory: Fundamental Problems, Ideas and Theories." (advanced)
W. Narkiewicz, "The Development of Prime Number Theory from Euclid to Hardy and Littlewood."