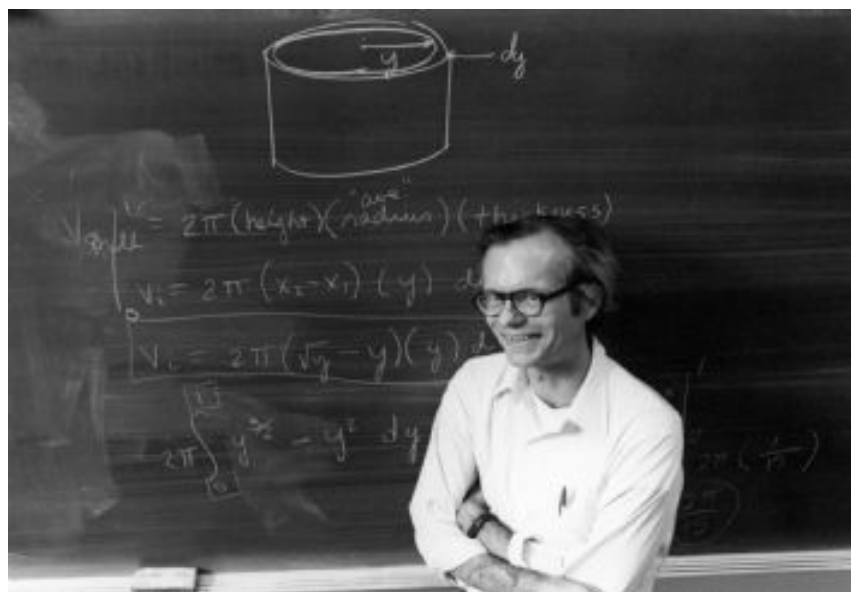


Preface

Note. The author of the text book is Underwood “Woody” Dudley. He worked as a research mathematician at DePauw University from 1967 to 2004. He has written a number of books on math, including the popular *Mathematical Cranks* (Mathematical Association of America, 1992) and *Numerology: Or, What Pythagoras Wrought* (MAA, 1997). He published the first edition of *Elementary Number Theory* in 1969 and the second edition in 1978. Dover Publications reprinted the second edition in paperback in 2008 and this version is still available (it does not have corrections of the 1978 version, but instead has simply replaced faulty statements with blank space). Your humble instructor took a Number Theory class from the book at Auburn University in Montgomery at fall quarter 1982 from Dr. Chester “Chet” Palmer.



Underwood Dudley (January 6, 1937 –)

From [DePauw University Announcement of the Publication of *Mathematical Cranks*](#) (accessed 6/25/2021)

Note. The text quotes Carl Friedrich Gauss (April 30, 1777 -February 23, 1855) when he refers to number theory as “The Queen of Mathematics.” The author then sings the praises of number theory: “The reason for its appeal is that the subject matter—numbers—is part of everyone’s experience, and the things that can be found out about them are interesting, curious, or surprising, and the ways they are found can be delightful: clean lines of logic, with sustained tension and satisfying resolutions.” See page *vii*.

Note. Underwood Dudley published a sort-of sequel to the book on which these notes are based: *A Guide to Elementary Number Theory*, The Dolciani Mathematical Expositions #41/MAA Guides #5, Mathematical Association of America (2009). The guide is a short work (141 pages), and not intended as a textbook (it has no problems, for example). The purpose is to give a brief introduction or a brief review of the topics covered in Dudley’s *Elementary Number Theory*, 2nd edition.

