HUSTON, Antoinette (Killen). November 23, 1904–July 13, 1993.
UNIVERSITY OF CHICAGO (BS 1926, MS 1930, PHD 1934).

Antoinette Marie Killen was born in Chicago, Illinois, the daughter of Anna (Harrold) (ca. 1876–1939) and Mark Henry Killen (1877–1945). Her parents were born in Indiana. In 1910 they were living in Hyde Park in Chicago, and Mark Killen was a groceries salesman. In 1930 the three were living in the Colonial Hotel in Hyde Park, and her father was a lumber salesman. At the time of Anna Killen's death in May 1939, Mark Killen was described as treasurer of the Union Lumber Company of Delaware, located in Chicago.

Antoinette Killen received her elementary and secondary education in the Chicago public schools and graduated from Nicholas Senn High School on the north side of Chicago in 1923. She later credited a "very inspiring high school teacher" with enhancing her interest in mathematics (Smithsonian questionnaire 1985).

Killen entered the University of Chicago in the autumn of 1923. In a letter to one of the authors that was postmarked March 9, 1978, she described aspects of her university life.

> All I ever wanted to be was a high school math teacher. But after graduating from U of C in 1926 no such job opened up so I settled for becoming librarian in charge of the math-physics-astronomy library because Professor Moore wanted a librarian who knew a number theory book from a trig. text. In about the same way I advanced to become Prof. Bliss's girl Friday – he wanted someone who could spell "function" and other mathematical terms. I was a self taught typist – and learned speedwriting in five weeks to become his secretary. The job and life were pleasant. I took one course at a time, played bridge, danced and dated graduate students, and wrote a master's thesis under Lawrence Murray Graves. . . . I really did not dream of working toward the doctorate – but all of a sudden A. A. Albert told me I was going to work with him – he had attended to all the preliminaries such as getting me admitted to candidacy.

Killen had begun taking graduate courses in October 1927 and received her MS in 1930. She earned her PhD in 1934, having also served as assistant secretary to Gilbert Ames Bliss, who had become department chairman in 1928. While at Chicago she studied with Professors A. A. Albert, G. A. Bliss, L. E. Dickson, L. M. Graves, and Mayme Logsdon, among others; she was Albert's first doctoral student. In her March 1978 letter she "list[s] among [her] good friends" the following women who were mathematics graduate students at Chicago: Frances Baker, Julia Wells Bower, Abba Newton, Mina Rees, Ruth Mason Ballard, Anne Stafford Henriques, Emily Chandler Pixley, Beatrice L. Hagen, Aline Frink, and Virginia Haun McShane.

Having just received her doctorate in June, on July 14, 1934, Antoinette Killen married Ralph Ernest Huston, a fellow graduate student. Ralph Huston, born in Huntington, Indiana, on September 16, 1902, graduated from the high school in Kewanee, Illinois, and then from the University of Chicago in 1923, the year Antoinette Killen entered. After graduating from Chicago, Huston was at Merton College, Oxford, as a Rhodes scholar for three years, after which he earned a Bachelor of Arts

in the Final Honour School of English Language and Literature. The following year he studied at the University of Grenoble. After returning to the United States in 1927, he was, for two years, associate professor of modern languages at Southwestern (later Southwestern at Memphis) in Tennessee before entering the University of Chicago for graduate study in mathematics in the summer of 1929. He earned his PhD in 1932, having written his dissertation in number theory under the direction of L. E. Dickson. Ralph Huston had also taught as a departmental assistant at Chicago, as acting professor at Iowa State College, and in the Extension Division of Indiana University in northwestern Indiana. In 1932–33 he was professor and acting head of the department at Wesleyan College, a women's college in Macon, Georgia.

In 1934 Antoinette and Ralph Huston moved to Troy, New York, where Ralph Huston began a thirty-three year association with Renssalaer Polytechnic Institute: as instructor 1934–37, assistant professor 1937–43, associate professor 1943–48, professor 1949–67, and professor emeritus after 1967. In her 1978 letter, Antoinette Huston described her marriage as having launched her "on a new career– being a wife and mother of Peter, Kenneth, Richard, and T. Michael Huston." Their first child, Peter Eugene, was born on November 21, 1935; the second, Kenneth, on February 17, 1937. The two younger boys were born within the next few years. She also wrote that "when 'baby' Mike was able to make his own peanut butter sandwich – in 1955 – [she] joined the math Dept at RPI as Assistant P." She remained an assistant professor until 1967, the year Ralph Huston retired, when she was promoted to associate professor. Two years later, on October 8, 1969, Ralph Huston died. Antoinette Huston retired as associate professor emeritus in 1970. The Ralph Ernest Huston Prize was established in 1973 by Antoinette K. Huston and their sons. It is awarded at commencement to the first- or second-year graduate student in the Department of Mathematical Sciences at RPI who has demonstrated unusual promise and ability as a teacher.

Antoinette Huston assisted W. L. Duren, Jr., in the preparation of his article "Graduate student at Chicago in the twenties" that appeared in the *Monthly* in 1976. She was active in the League of Women Voters and was a member of the American Contract Bridge League. An avid duplicate bridge tournament player, she reported in 1978 that she "liked to play five or six times a week, and spend any spare moments reading books by bridge experts." Huston moved to Santa Fe, New Mexico, in the 1970s and died there in 1993 at age eighty-eight. She was survived by her four sons, four grandchildren, and one great-grandchild. She was buried in Huntington, Indiana, her husband's birthplace.

Organizational affiliations: AMS, MAA, Phi Beta Kappa, Sigma Xi.

Thesis and dissertation:
1930 [Killen, A. M.] An application of the Cauchy-Lipschitz method to a system of functional equations. MS thesis, University of Chicago, directed by Lawrence Murray Graves. Typescript.
1934 [Killen, A. M.] The integral bases of all quartic fields with a group of order eight. PhD dissertation, University of Chicago, directed by Abraham Adrian Albert. Typescript. Private edition, 1936, distributed by the University of Chicago Libraries.

References to: AmMSc 10P–11P; AmMWSc 12P–13P, 14; WhoAmW 6.
"Dr. Antoinette E. Huston." (Obituary) *Santa Fe New Mexican*, 15 Jul 1993.

Other sources: MS thesis vita 1930; PhD dissertation vita 1934; Owens questionnaire 1937; Owens Papers; personal correspondence with author 1978; Smithsonian questionnaire 1985; communication with Santa Fe Public Library; "Mrs. Anna Killen," (Obituary) *Chicago Daily Tribune*, 27 May 1939; WhAm 5 (Huston, Ralph Ernest); US Census 1910, 1930 IL.

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