JOHNSON, Roberta F. January 22, 1902–October 12, 1988.
WILSON COLLEGE (BA 1925), CORNELL UNIVERSITY (MA 1931, PHD 1933).

Roberta Frances Johnson was born in Philadelphia, Pennsylvania, the daughter of Mary Wallace (Abdill) (1874–1918) and Jesse B. Johnson (1875–1936). Her mother was born in New Jersey, her father in Philadelphia. Her parents were educated through grade school and married in about 1895. Johnson later described her mother as a homemaker and her father as a mechanic; census records describe his occupation as machinist. A sibling born before 1900 was not living in 1900. A younger sister, Lillian, born about 1907, died at age three.

Roberta Frances Johnson attended Frankford High School in Philadelphia before enrolling at Wilson College, a women's college in Chambersburg, Pennsylvania. At Wilson she was a member of a literary club, the science club, and the international relations club and was president of the latter her senior year. Upon graduation from Wilson in 1925 with departmental honors in mathematics and a minor in history, she remained in Chambersburg three years, 1925–28, to teach mathematics at the Chambersburg high school. She taught mathematics and history for the next two years in the high school in Newfoundland, Pennsylvania.

Johnson attended summer sessions at Cornell University during 1929 and 1930. She remained at Cornell in the fall of 1930 and enrolled with a fellowship from Wilson College intending to major in mathematics and minor in modern European history. In February 1931 she received her master's degree with both her major and minor in mathematics. She retained the fellowship from Wilson during her three years at Cornell and also held an Erastus Brooks fellowship her second year there. After a third year of study at Cornell, with major subject geometry, first minor analysis, and second minor philosophy, she received her doctorate in 1933 with a dissertation in algebraic geometry directed by Virgil Snyder. Her published dissertation, **1934**, was described by Snyder in a review of a French monograph as "an excellent introduction to this memoir" (*Bull. Amer. Math. Soc.* 41 (1935): 170).

Johnson had expected to remain at Cornell 1933–34 as a "resident doctor" in order to continue her research. However, the head of the mathematics department at Wilson became ill, and Johnson was to substitute for at least a month beginning in September. When the head took a leave of absence, Johnson remained for the academic year 1933–34 on a temporary appointment. Johnson taught at Wilson for twenty-five years. She was an instructor 1934–35, assistant professor 1935–44, and associate professor after 1944. During this time she taught all of the undergraduate courses and honors courses. She was acting head of the department second semester 1944–45 and became department head in 1946 when the previous chairman retired.

After receiving her doctorate, Johnson stayed active in the mathematical community. She attended many local and national meetings of the American Mathematical Society in the eastern United States, from Durham, North Carolina, north to Providence, Rhode Island. In 1951 she served as a referee for one of the AMS publications. During the summer of 1957, Johnson participated in a summer institute in social sciences for college mathematics teachers at Stanford University. While at the institute she asked for a letter of recommendation from Robert J. Walker, a Cornell faculty member whom she had seen at meetings of the American Mathematical Society. She wrote, "This spring I decided, after 24 years at

Wilson College to make a change. This has not been an easy decision to reach–it should have been made twelve years ago when the former head retired. Unfortunately those of us who launched our careers in the midst of the depression have a false notion about security. Also, this will be my first experience in job hunting. Previously the job or fellowship hunted me" (Cornell University, Department of Mathematics files). She continued, "I am prepared to adjust to a new pattern of work and I expect to follow rather than lead in a new position. If necessary, I am ready to leave the teaching field but I believe that I have the most to contribute in an academic position. However, I definitely desire to move to a co-educational institution. . . . I shall not bore you with the details of my reasons for this decision. My fellow faculty members will view it as a refusal to accept the injustice of being passed over when promotions are made. It is not that alone. I need a change . . . " In a letter the following spring, she wrote that Wilson found out about her search, and she received a promotion to full professor and a tenure contract. However, she continued to look for a new position.

In 1958 Johnson moved to Fort Collins, Colorado, as an associate professor at Colorado State University. While there she directed the theses of about eight master's students. Johnson remained at Colorado State until her retirement as associate professor emeritus in 1967. The following spring the University of Colorado announced her appointment as an associate professor, and she taught at the University of Colorado at Denver for three years after her retirement.

Johnson indicated in 1985 that she was a Presbyterian until 1925 and had no religious affiliation after that. In summer 1936 she was in Ann Arbor as a reader for the College Entrance Board; in September of that year she traveled to Bermuda. During World War II, she did sewing for the Red Cross. She was also a member of a Wilson College alumnae club. In the mid-1980s she listed reading as a hobby.

Roberta Johnson died of bone cancer in 1988 at age eighty-six at her home in Fort Collins. During her illness she was cared for by friends and by a local hospice organization, to which she bequeathed her house. Her remaining assets were given to the Fort Collins public library. She was cremated and had requested that there be no memorial service.

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

Thesis and dissertation:
1931 Certain properties and a classification of nets of conics. MA thesis, Cornell University, directed by Virgil Snyder. Typescript.
1933 Involutions of order 2 associated with surfaces of genera $p_a = p_g = 0$, $P_2 = 1$, $P_3 = 0$. PhD dissertation, Cornell University, directed by Virgil Snyder. Typescript. Printed version, 1934, reprinted from *Amer. J. Math.* 56:199–213.

Publications:
1934 Involutions of order two associated with surfaces of genera $p_a = p_g = 0$, $P_2 = 1$, $P_3 = 0$ . . . *Amer. J. Math.* 56:199–213. Published version of PhD dissertation. Reviews: *JFM* 60.0581.01 (O. H. Keller); *Zbl* 009.03502 (E. G. Togliatti).
1936 Review of *Leibniz et les démonstrations mathématiques de l'existence de Dieu*, by J. Iwanicki. *Scripta Math.* 4:169–72.
1938 Review of *Morin et les démonstrations mathématiques de l'existence de Dieu*, by J. Iwanicki. *Scripta Math.* 5:132–34.

1939 Review of *Procedures and Metaphysics: A Study in the Philosophy of Mathematical-Physical Science in the Sixteenth and Seventeenth Centuries*, by E. W. Strong. *Scripta Math.* 6:235–37.

1940a Review of *Tables for Converting Rectangular to Polar Coordinates*, by J. C. P. Miller. *Amer. Math. Monthly* 47:103.

1940b Review of *Textes Mathématiques Babyloniens*, edited and translated by F. Thureau-Dangin. *Amer. Math. Monthly* 47:651–52.

1943 Review of *Basic College Mathematics: A General Introduction*, by C. W. Munshower and J. F. Wardwell. *Amer. Math. Monthly* 50:450.

References to: AmMSc 6–8, 9P–11P; AmMWSc 12P.
"Roberta F. Johnson." (Obituary) *Fort Collins Coloradoan*, 14 Oct 1988.
"Roberta F. Johnson '25, Wilson Professor of Mathematics." (Obituary) *Wilson College Alumnae Quarterly*, Spring 1989.

Other sources: PhD dissertation biography 1933; Owens questionnaires 1937, 1940; Smithsonian questionnaire 1985; Division of Rare and Manuscript Collections, Cornell University Library; Former Members of the Department files, Cornell University Department of Mathematics; communications with Main Library of the Fort Collins Regional Library District and with Wilson College Archives; US Census 1900, 1910, 1920, 1930 PA; SSDI.

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