ROE, Josephine (Robinson). May 5, 1858–April 29, 1946.

OBERLIN COLLEGE (BA 1894), DARTMOUTH COLLEGE (MA 1911), SYRACUSE UNIVERSITY (PhD 1918).

Josephine Alberta Robinson was born in Meredith, New Hampshire, the daughter of Frances Eliza (Weld) (1831–1906), a native of Maine, and Joseph Wadleigh Robinson (1817–1886) of New Hampshire, a farmer. The marriage in 1852 was the second for her father. She had two older sisters and four younger brothers. Her siblings were: Helen Augusta (1854–1932), Emma Jane (1856–1864), Francis Joseph (1864–1935), Maurice Henry (1865–1946), Charles Frederick (1866–1932), and George Washington (b. 1872). Her three youngest brothers all attended Dartmouth College; Maurice Henry and Charles Frederick graduated in 1890, and George Washington transferred to Harvard after his sophomore year. Maurice Henry Robinson became an economist and spent most of his career at the University of Illinois after earning a PhD from Yale in 1902. Charles Frederick Robinson became a Congregational minister and, after his retirement, taught at Boston University. George Washington Robinson became an author and was secretary of the Harvard Graduate School of Arts and Sciences 1904–28.

Josephine Robinson did her secondary work at the New Hampton Literary Institution, a few miles west of Meredith. She entered in November 1873, did the English course, and graduated in 1880, having completed both the commercial and the regular courses. She taught for more than a decade in New Hampshire schools before entering college. Her early teaching positions included: teacher in New Hampshire public district schools for about fifteen months; principal of the high school in Laconia 1880–82; and teacher, 1882–89, and preceptress, 1889–90, New Hampton Literary Institution and Commercial College.

Robinson entered Oberlin College at age thirty-two in 1890 and graduated four years later having done her major studies in mathematics. While at Oberlin, she was a leading member of a literary society, and "... her productions were acknowledged to be superior in thought and execution and in debate she was irresistible" (Berea College Archives). She was also a member of the First Congregational Church in Oberlin.

After graduating from Oberlin, Robinson was preceptress (instructor) at Kimball Union Academy in Meriden, New Hampshire, 1894–97, where her main duty was teaching Latin. She had been engaged in postgraduate work at Oberlin in Latin and German education when she was "called" to Berea College in Kentucky in 1897. Upon her arrival at Berea she taught Latin (Livy and Caesar), English literature, and mathematics. At Berea she was principal of the Ladies Department and acting professor of mathematics 1897–1901, dean of women 1901–07, and professor of mathematics 1901–11. During her tenure at Berea, the mathematics courses offered by Robinson and her colleagues, all of whom were male, were Arithmetic I, II, III; Algebra; Geometry; Trigonometry; Surveying; and Navigation. During the summers of 1907 to 1910 she studied at Dartmouth College and received a master's degree in mathematics in June 1911.

On February 1, 1911, in Berea, Kentucky, Josephine Robinson married Edward Drake Roe, Jr., a widower and mathematics professor at Syracuse University. E. D. Roe was born in Elmira, New York, on January 4, 1859. He earned bachelor's degrees from Syracuse in 1880 and Harvard in 1885 and a master's degree from

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Harvard in 1886. He married Harriet Adelaide Bridge Gourley in 1890 and shortly thereafter adopted her daughter, Mary Eva Gourley (b. 1879). After teaching at Harvard and at Boston University, he went to Oberlin College as associate professor of mathematics in 1892, when Josephine Robinson was in her third year there. He was granted a leave 1897–99, studied at Erlangen 1897–98, and received a PhD from there in 1898 having worked with Paul Gordan. His first wife died in 1898, and he remained on the faculty at Oberlin until the end of his leave in 1899. E. D. Roe was on the faculty at Syracuse University from 1900 until his death twenty-nine years later. In 1901 he was appointed to the John Raymond French chair of mathematics, and in 1919 he was appointed director of the Holden Observatory at Syracuse; he also served as head of the mathematics department. He built a private observatory at his home and was the founder of the national honorary mathematics society Pi Mu Epsilon in 1914.

After her marriage in February 1911, Josephine Robinson Roe left Berea College and moved to Syracuse, where she subsequently engaged in graduate studies in mathematics. In 1918, at age sixty, she received a PhD from Syracuse University with a dissertation that she began with the statement: "This investigation is a continuation of published work of Professor E.D. Roe, Jr., to whom I am greatly indebted for assistance and advice." She taught as assistant professor at Syracuse in 1920; when she joined the MAA in 1934 she listed herself as assistant professor, retired. E. D. Roe died suddenly from a heart attack at their home on December 11, 1929, less than a month before his seventy-first birthday. In 1931 Josephine Roe had her dissertation printed in two parts, the second of which reproduced tables whose plates had been prepared by a student; the printed versions were referenced in mathematical and statistical literature at least through 1961.

In response to an inquiry from Helen Owens, Roe wrote on her questionnaire in 1940 that she was a Methodist and a Republican. She listed her honors as Phi Beta Kappa, Phi Kappa Phi, and Sigma Xi, and indicated that she was a fellow of AAAS. She noted that she was a life member of the AMS and also of the American Astronomical Society. She wrote that she "assisted [her] husband somewhat in his private Observatory in [their] residence. [She was] interested in birds and wild flowers, housekeeping, support of Christian missions at home and abroad, and of temperance work. A lover of travels, a wide reader. Have been active in Daughters of the American Revolution. Especially interested in people, just people, everywhere. A firm believer in immortality." Josephine Robinson Roe died in Newton Center, Massachusetts, in April 1946, shortly before her eighty-eighth birthday.

Organizational affiliations: AMS, Amer. Astron. Soc., AAAS (fellow), Phi Beta Kappa, Sigma Xi.

Dissertation:

1918 Interfunctional expressibility problems of symmetric functions and Interfunctional expressibility tables of symmetric functions. PhD dissertation, Syracuse University, directed by Edward Drake Roe, Jr. Printed version of first part, 1931, Cambridge, MA; printed version of second part, 1931, Syracuse, NY, distributed by Syracuse University.

Abstracts:

1917 Interfunctional expressibility problems of symmetric functions. *Bull. Amer. Math. Soc.* 23:158–59 #1. Presented to the AMS, New York City, 28 Oct 1916. Based on first part of PhD dissertation. Review of abstract: *JFM* 46.0165.05 (G. Szegö).

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1917 Interfunctional expressibility problems of symmetric functions. Second paper. *Bull. Amer. Math. Soc.* 24:70 #24. Presented by E. D. Roe, Jr., to the AMS, Cleveland, OH, 5 Sep 1917. Based on first part of PhD dissertation.

1918 Interfunctional expressibility problems of symmetric functions (third paper). Bull. Amer. Math. Soc. 25:55 #11. Presented to the AMS, Hanover, NH, 5 Sep 1918. Based on first part of PhD dissertation.

References to: AmMSc 3-7, BiDWSci.

Other sources: Owens questionnaires 1937, 1940; Owens Papers; Gordon-Nash Library, New Hampton, NH; Meredith, NH, Public Library; New Hampton School, New Hampton, NH; communications with Berea College Archives, Dartmouth College Archives, and with Oberlin College Alumni Association; John C. Gowan and Pauline Swain Merrill, Genealogy of the Town of New Hampton, New Hampshire (New Hampton, NH: Gordan-Nash Library, 1940s); A. D. Campbell, "Edward Drake Roe, Jr.—In Memoriam," Bull. Amer. Math. Soc. 36 (1930): 161; WhAm 1 (Roe, Edward Drake, Jr.); US Census 1860, 1870, 1880, 1900 NH, 1910 KY, 1920, 1930 NY.

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