McCAIN, Gertrude I. July 15, 1879–April 4, 1955.
INDIANA UNIVERSITY (BA 1908, MA 1911, PHD 1918).

Gertrude Iona McCain was the daughter of Alice A. (Neff) (b. 1855) and Charles Edwin McCain (b. 1854), natives of Indiana who married in Carroll County, Indiana, on December 28, 1876. In 1880 her parents, her two-year-old brother, Christian, and she were living with her maternal grandparents in Three Rivers, Michigan, where she was born. At that time, her father was a grocer. By 1900 her family was living in Delphi, Indiana, and her father was a manufacturer of lime. In 1910 he was described as a foreman in the lime business; in 1920 her widowed father was bailiff at the county court.

McCain graduated from the Delphi high school in 1896, at sixteen. During the next four years she attended Indiana State Normal School for a year and a half and was a teacher in the high school in Delphi from 1897 to 1899. During most of the following decade, she worked, some as a librarian, and did her undergraduate work at Indiana University.

In the fall quarter of 1900, McCain entered Indiana and remained through the spring term 1902. She then interrupted her studies for five years, some of this time as librarian for the Delphi Public Library. In June 1905 she inquired about a place as assistant in the Indiana University library. She wrote to Dr. Robert J. Aley, a member of the mathematics department at Indiana, on June 19, 1905, "I would take the barest living expenses for a salary, if I had time to take some college work. I would like to go on with Mathematics if I have not forgotten too much. I have been in library work two years and expect to attend the school held by the the State Library Commission this summer at Winona" (Indiana University Archives). Apparently McCain did not get the position for she remained at the library in Delphi through the summer of 1907. She was finally able to return to Indiana for the academic year 1907–08 and graduated in 1908 shortly before she turned twenty-nine.

During the next ten years, McCain taught and did graduate work in mathematics. She was principal of the Friends' High School, a Quaker school in Salem, Indiana, 1908–09 and began her graduate studies at Indiana in summer 1909. She continued in the fall term 1909–10 and, after a break, resumed her graduate work in summer 1910. She was a teaching fellow during the academic year 1910–11 and earned one of four master's degrees in mathematics granted by Indiana in 1911. The following year, 1911–12, McCain was a fellow in mathematics at Bryn Mawr College, where it is recorded that she gave a talk on discontinuous groups at the Bryn Mawr Mathematical Journal Club. In February 1912 McCain asked for a recommendation from Indiana to support an application for a position at Wilson College, which she apparently did not get.

In at least 1912 McCain was again teaching at the high school in Delphi, giving instruction in both mathematics and English, although she was also doing graduate work at Indiana University in the winter and spring terms of 1913–14. She continued with a fellowship at Indiana the academic year 1914–15. She was also president of the Graduate Club in 1914. In 1915 McCain took a position as professor of mathematics at Oxford College for Women (later merged with Miami University) in Oxford, Ohio, where she remained for six years. During this period, in 1918, at

nearly thirty-nine, she completed the work for her PhD at Indiana with a minor in philosophy, which at that time included psychology.

McCain left Oxford College in 1921, taught at Hunter College in New York City that summer, and in September 1921 became professor at Westminster College in New Wilmington, Pennsylvania, where she remained until June 1928. She started teaching at the State Teachers College (now Radford University) in East Radford, Virginia, in the summer quarter 1929 and remained as professor until the end of the academic year 1930–31. In June 1931 she requested that a transcript of her work at Indiana be sent to the Department of Education in Sacramento, California. She wrote that she hoped to get located in California that year. She was applying for a general secondary credential but had insufficient hours in courses designated as education courses and so was not eligible to apply.

In 1931–32 McCain taught mathematics as a professor at Marymount College in Salina, Kansas, before Sister Mary Nicholas Arnoldy assumed the position there. In September 1933 McCain was still trying to get secondary credentials in California and asked that the many courses in philosophy (which included psychology) that she had taken at Indiana be itemized, which they were. Again she was unsuccessful. According to MAA membership lists, she was living in her hometown of Delphi in 1933–34 and in East Radford, Virginia, in 1935–36, in both cases without a professional affiliation. She was professor of mathematics and physics at Brenau College, a private women's college in Gainsville, Georgia, in the academic year 1937–38. While there she also served as the head of the house for a sorority on campus. There is no indication of any professional activity after this time although she sought a position at Athens College in Alabama in 1940 when she was sixty, presumably when she learned of the retirement of Kathryn Wyant because of illness.

From December 1915, when McCain attended the organizational meeting of the MAA at Ohio State University, until the late 1930s, she maintained her affiliation with the MAA and submitted problem solutions to the *Monthly* over a period of about twenty years. She also joined the AMS in 1915 but appears to have dropped her membership about the time she left State College in Radford.

At some point McCain returned to Delphi, Indiana, where she was a member of the Presbyterian Church. She was also a fifty-year member of the Rose Chapter of the Order of the Eastern Star.

Gertrude McCain suffered from cardio-vascular-renal disease and generalized arthritis for several years before her death in 1955 at age seventy-five in the Deer Creek nursing home near Delphi in Carroll County, Indiana. She had been a patient at the nursing home for two weeks at the time of her death. She was survived by a niece and nephew in Delphi and two grand-nephews and was buried in the IOOF (Independent Order of Odd Fellows) cemetery in Delphi.

Organizational affiliations: AMS, MAA (charter member).

Thesis and dissertation:
1911 Theory of the absolute. MA thesis, Indiana University.
1918 Series of linear iterated fractional functions – character of the functions. PhD dissertation, Indiana University.

References to: AmMSc 3.
"Gertrude McCain Dies Monday in Nursing Home." *Delphi* (IN) *Citizen*, 7 Apr 1955.

Other sources: Bryn Mawr College Archives; Indiana University Archives; Miami University (OH) Archives; communications with Brenau University Alumni Affairs Office, Delphi Public Library, Indiana University Alumni Association, Sisters of St. Joseph Archives, Westminster College Archives; US Census 1880 MI, 1900, 1910, 1920, 1930 IN; Indiana death certificate.

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