**MOORE, Nina M. (Alderton).** August 19, 1890–November 23, 1973.
Mount Holyoke College (BA 1914), Columbia University (MA 1915), University of California (PhD 1921).

Nina May Alderton was the second of two children of Arah Eleanor (Easter) (1852–1940) and Joseph Wilton Alderton (1852–1918) of West Virginia. Her parents married there in 1875. Nina Alderton was born in Berkeley Springs, West Virginia; her sister, Viola (1878–1954), was born in Poughkeepsie, New York. In 1900 the family was living in Washington, D.C., where Joseph Alderton was a real estate agent; shortly thereafter, her father was living in Ohio. Her parents presumably divorced as her father remarried in about 1902 and had two more children.

In April, at the time of the 1910 census, Nina Alderton and her mother were living in South Hadley, Massachusetts, where Nina Alderton would attend Mount Holyoke College. She entered Mount Holyoke in 1910 and completed twenty-four hours in physics and twenty-one in mathematics before graduating in 1914. She did graduate work between February 1914 and August 1915 at Yale University and Columbia University. She took four courses at Yale (Advanced Calculus with E. W. Brown, Differential Equations with P. F. Smith, Higher Algebra with D. Leib, and Differential Geometry with J. Pierpont) and six at Columbia (Modern Theories in Geometry with C. J. Keyser, Projective Geometry with W. B. Fite, Theory of Functions of a Real Variable with J. Maclay, History of Mathematics with D. E. Smith at Teachers College, and courses in Analytical Mechanics with G. B. Pegram and Advanced Laboratory Work in Physics with C. C. Trowbridge). She received her master's degree from Columbia in October 1915 with a thesis on multidimensional geometry.

Alderton was an instructor of mathematics at Mount Hermon School in Massachusetts 1915–18. In 1918, before the end of World War I, she became a laboratory assistant involved with X-ray work at the National Bureau of Standards (NBS) (now National Institute of Standards and Technology) in Washington, D.C., and taught at night in a high school. Her work at NBS led to her inclusion as an author of a talk, presented by title, to the American Physical Society in 1919. Alderton and her mother moved to Berkeley, California, in 1919.

Alderton resumed her graduate studies at the University of California, where she was an assistant in mathematics 1919–21. There she had four courses with D. N. Lehmer (Synthetic Projective Geometry, Research in Hyperspace, Theory of Numbers, and Algebraic Surfaces), two courses with M. W. Haskell (Higher Plane Curves, Theory of Functions of a Complex Variable), and one course each with B. A. Bernstein, (Logic of Mathematics) and J. H. McDonald (Elliptic Functions). Her dissertation was directed by Lehmer, and she received her PhD in 1921 after taking her final examination in April of that year.

In August 1921 Nina M. Alderton went to Mills College, a women's college in nearby Oakland, as instructor of mathematics and physics. She joined the one other mathematics faculty member, Hettie Belle Ege, who had a bachelor's degree from Mills and was dean and professor of mathematics. Alderton was assistant professor 1922–26 and associate professor 1926–34. In 1923 she became chairman of what was normally a two-person department; Emma Whiton (McDonald) was at Mills from fall 1923 to January 1925, when she was replaced by Elsie McFarland (Buck), who stayed until the end of that semester. Alderton had a leave of absence

during the academic year 1932–33, returned that fall, and, according to the Mills College *Bulletin*, resigned effective January 1934; the local AAUP chapter offered her assistance the following month.

In 1927 Alderton was already looking for other positions. In February 1927 she indicated that she was writing a book on hyperspace. In a letter of May 9, 1927, to Miss Florence Purington at Mount Holyoke College, Alderton wrote, "I shall want to stay here until I am able to obtain a more promising position. Educational ideas are becoming too radical for me here" (Mount Holyoke College alumna file). She also indicated that she gave all the graduate courses in mathematics including the master's thesis. That summer of 1927, Alderton was in Europe. She taught at John Brown University in Siloam Springs, Arkansas, during her leave from Mills in 1932–33.

Nina May Alderton married William Harrison Moore on July 16, 1934. Moore was born in 1878 in Oregon and since sometime in the 1920s had lived in California where he was a real estate broker. Nina Moore described herself as a homemaker on the questionnaire she sent to Helen Owens in 1937. She later described her professional activity as assistant in the real estate business in California during the period 1934 to 1939. Her husband died October 1, 1939, and Nina Alderton Moore sought academic employment after his death. From 1940 to 1942 she was a teacher at the Drew School in San Francisco, and the next year she was a professor of mathematics and physics at John Brown University in Arkansas, where she had taught during her 1932–33 leave from Mills. Moore taught at West Liberty State College in West Virginia 1943–45.

In 1945 Moore returned to Washington, D.C., and the National Bureau of Standards, this time as a mathematician. According to a Yale alumni directory, she was still living there in 1968 and held, or had held, an appointive position in government service. Moore had joined AAAS in 1947 and was a member of the physics and the mathematics sections. She was a Baptist.

Nina Alderton Moore moved to Vancouver, British Columbia, Canada, by 1970 and died there in 1973 at age eighty-three.

**Organizational affiliations:** AMS, MAA, AAAS, Phi Beta Kappa, Pi Mu Epsilon.

**Thesis and dissertation:**

**1915** [Alderton, N.] Digest of volume I of Schoute's 'Mehrdimensionale geometrie'. MA thesis, Columbia University.

**1921** [Alderton, N.] Involutory quartic transformations in space of four dimensions. PhD dissertation, University of California, directed by Derrick Norman Lehmer. Typescript. Printed version, 1923, reprinted from *Univ. Calif. Publ. Math.* 1:345–58.

**Publication:**

**1923** [Alderton, N.] Involutory quartic transformations in space of four dimensions. *Univ. Calif. Publ. Math.* 1:345–58. Published version of PhD dissertation. Review: *JFM* 49.0489.01 (W. Fr. Meyer).

**Presentation:**

With N. E. Dorsey, W. S. Gorton, P. T. Weeks. Study of x-ray protective materials. Presented by title to a meeting of the Amer. Physical Soc., Washington, DC, 25–26 Apr 1919.

**References to:** AmMSc 4–5, 7–8, 10P–11P.

**Other sources:** Owens questionnaires 1937, 1940; application for social security number 1940; Mount Holyoke College alumnae files; University of California, Berkeley, Archives; US Census 1900 DC, 1900, 1910 OR, 1910 MA, 1920, 1930 CA.

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