LOGSDON, Mayme (Irwin) February 1, 1881–July 4, 1967.
University of Chicago (BS 1912, MA 1914, PhD 1921).

Mayme Irwin was born in Elizabethtown, Kentucky, the daughter of Nan Belle (Farmer) (1857–1892) and James David Irwin (1852–1921), both of Kentucky. She was the second of five children from her father's first marriage; her brothers were William F. (1879–1944), Jessie C. (1884–1957), and Robert T. (b. 1888); her sister was Mary (1892–1981). There were three children from her father's second marriage in about 1894: Madge L. (b. 1895), Myrtle I. (b. 1897), and James D. Jr. (b. ca. 1906). Her father, a constable in Elizabethtown in 1880, became an attorney in 1883.

Mayme Irwin attended public primary and secondary schools and graduated from the Hardin Collegiate Institute, all in Elizabethtown, Kentucky. The Institute was primarily a preparatory school with a business course and a teachers' course, in which Irwin probably was enrolled. Although Logsdon wrote in her 1914 master's thesis vita that she had received a BA from Hardin, it is unlikely that the degree represented a four-year program.

Irwin was a high school teacher and principal from 1900 to 1911. On August 1, 1900, she married Augustus H. Logsdon (1859–1909), a businessman of nearby Munfordville. Logsdon had two children from his first marriage, Nell (b. ca. 1892) and Ollie Preston (1897–1990); there were no children from his marriage with Mayme Irwin. In 1910, the year after she was widowed, Mayme Logsdon and her stepchildren, then eighteen and twelve, were living with their aunt and uncle in Elizabethtown. Her stepson remained with an aunt in Elizabethtown, while her stepdaughter later moved to the west, where she married and lived in Wyoming.

Logsdon returned to school in 1911 at the University of Chicago, where she completed the work for her bachelor's degree in August of 1912. She began her graduate study there in 1912 and after a year took a position as the mathematics instructor and dean of women at Hastings College in Nebraska. After her first year there, 1913–14, she returned to Chicago for the summer and completed the courses and thesis for a master's degree. She remained at Hastings College as professor of mathematics and dean of women for three more years, 1914–17. While there she taught all of the mathematics courses, college algebra through differential and integral calculus.

Logsdon was an instructor at Northwestern University 1917–19 before resuming her graduate work at Chicago, as a fellow in 1919–20 and as an associate in 1920–21. After completing her doctorate at age forty in 1921, she remained at the University of Chicago as instructor 1921–25, assistant professor 1925–30, and associate professor 1930–46; she retired as associate professor emeritus in 1946.

Mayme Logsdon was the only woman to hold a regular faculty position above the rank of instructor in the Chicago mathematics department before 1982. In addition to her faculty duties, she served as a dean in the College of Science 1923–27 and was head of Kelly Hall, a graduate dormitory, for many years. Later she had a house built in Ogden Dunes in nearby northwestern Indiana and commuted to Chicago.

Although Logsdon was a student of L. E. Dickson, her interests shifted to algebraic geometry early in her career at Chicago. She sailed to Italy in June 1925 to study in Rome on a foreign fellowship granted by the International Education Board. Shortly before Logsdon returned from Italy in 1926, she gave a lecture in

Rome based on her 1925 paper in the *Transactions* of the AMS. As noted in his autobiography, *Apprentissage d'un mathematicien*, Andre Weil attended the lecture, and it was from the offprints of this paper that he learned of Mordell's work on elliptic curves. In his autobiography, Weil referred to Logsdon as "la jeune americaine" although at the time of her lecture he was nineteen and she was forty-five. In a private correspondence with one of the authors, Robert P. Langlands of the Institute for Advanced Study wrote, "I found Weil's treatment of her rather ungenerous, as she in fact put him on the trail of something important in his career.... [S]he recognized the interest and importance of the theorem of Mordell, and ... simply having drawn Weil's attention to it earns her a small place in the history of mathematics."

Logsdon resumed her duties at Chicago in October 1926. The following year she was appointed the MAA representative to the American section of the International Mathematical Union that was planning the 1928 International Mathematical Congress in Bologna. During the early 1930s she refereed papers submitted to the *Bulletin* and the *Transactions* of the AMS and presided at scientific sessions at meetings of that organization. At the University of Chicago, Logsdon regularly gave advanced courses in algebraic geometry and directed the PhD dissertations of four students in this area between 1933 and 1938. The students were Anna A. Stafford (Henriques) 1933, James Edward Case 1936, Clyde Harvey Graves 1938, and Frank Ayres, Jr. 1938. During this period she was also interested in undergraduate education, and, in addition to giving talks in that area, she wrote two textbooks. The two-volume *Elementary Mathematical Analysis*, which appeared in 1932 and 1933, is what might now be called an elementary functions or precalculus textbook; the 1935 *A Mathematician Explains* treats topics prerequisite to calculus and briefly introduces both differential and integral calculus. In a 1937 article about the mathematics curriculum in schools, her student Anna Stafford noted that *A Mathematician Explains* "is not the kind of book you expect the public to get excited about, but it is selling. When a news company orders twelve dozen copies you know it is not for any altruistic notions about aiding the the cause of science. People want to read that book" (p. 408).

Logsdon was a member of the Central Association of Teachers of Mathematics and Science, a charter member of the MAA and an MAA governor-at-large 1940–42. She also founded the Illinois section of Delta Kappa Gamma, an honorary society for women in education, and was active in Sigma Delta Epsilon (now Sigma Delta Epsilon/Graduate Women in Science), for which she was president in 1939 and received applications for fellowships in the early 1950s. She held offices in Chicago chapters of AAUW, Phi Beta Kappa, and Sigma Xi.

After her retirement in 1946 from the University of Chicago, Logsdon moved to Florida, where she taught mathematics at the University of Miami until her second retirement at age eighty in 1961. After living in Miami for a while, she had a house built in Coral Gables, where she lived until she moved to a nursing home. Logsdon was a Baptist and a Democrat. She was an avid bridge player, who traveled around the country to earn masterpoints. Her many international travels included trips to most of Europe, the Yucatan, the Caribbean, and Greece. She was also interested in swimming, golf, and birds. She has been described by a relative and a family friend as "a magnet," "personable," "fun, funny, can do," "vivid," and "warm." Langlands wrote of her, "Given her age at the time she finished her thesis, her

subsequent development suggests a spirit and cast of mind that were intellectually open and adventurous." At her death in 1967 at the age of eighty-six in Coral Gables, Mayme Logsdon was survived by her sister, Mary E. Irwin, of Chicago.

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

Thesis and dissertation:

1914 Synchronous curves. MA thesis, University of Chicago, directed by Kurt Laves. Typescript.

1921 Equivalence and reduction of pairs of Hermitian forms. PhD dissertation, University of Chicago, directed by Leonard Eugene Dickson. Private edition, 1922, distributed by the University of Chicago Libraries, reprinted from *Amer. J. Math.* 44:247–60.

Publications:

1922 Equivalence and reduction of pairs of Hermitian forms. *Amer. J. Math.* 44:247–60. Published version of PhD dissertation. Reviews: *JFM* 48.0095.02 (A. Loewy); *Rev. semestr. publ. math.* 31, pt. 1: 2 (E. B. Cowley). Presented as "The equivalence of pairs of Hermitian forms" to the AMS, Chicago, 25 Mar 1921; abstract: *Bull. Amer. Math. Soc.* 27:403–04 #4; review of abstract: *JFM* 48.0095.01 (A. Loewy).

1925 Complete groups of points on a plane cubic curve of genus one. *Trans. Amer. Math. Soc.* 27:474–90. Reviews: *JFM* 51.0513.06 (W. Fr. Meyer); *Rev. semestr. publ. math.* 33, pt. 2: 16 (P. Mulder). Presented as "Closed sets of rational points on a plane cubic curve of genus one" to the AMS, Evanston, IL, 29 Dec 1922; abstract: *Bull. Amer. Math. Soc.* 29:119 #5.

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1932 Review of *Elementargeometrie der Ebene und des Raumes*, by M. Zacharias. *Amer. Math. Monthly* 39:112.

1932–33 *Elementary Mathematical Analysis.* 2 vols. New York: McGraw-Hill Book Co. Reviews: *Amer. Math. Monthly* 40:486–87 (C. A. Nelson); *Math. Teacher* 32:491 (vol. 1) and 33:314–15 (vol. 2); *Sch. Sci. Math.* 33:339–40 (J. M. Kinney).

1933 Review of *Analytische Geometrie*, 2nd ed., by L. Bierberbach. *Bull. Amer. Math. Soc.* 39:187.

1934a Review of *Lehrbuch der höheren Mathematik für Universitäten und technische Hochschulen*, vols. 1 & 2, by G. Kowalewski. *Bull. Amer. Math. Soc.* 40:23–24.

1934b Review of *Lehrbuch der höheren Mathematik für Universitäten und technische Hochschulen*, vol. 3, by G. Kowalewski. *Bull. Amer. Math. Soc.* 40:517.

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1937 Review of *Das Grenzgebiet der elementaren und höheren Mathematik*, by K. Kommerell. *Amer. Math. Monthly* 44:474.

1938 Geometries. *Amer. Math. Monthly* 45:573–83. Review: *JFM* 64.0587.01 (E. Sperner). Presented to the NCTM, Atlantic City, NJ, 26 Feb 1938.

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1925 Cross ratios in the complex plane. *Amer. Math. Monthly* 32:331–32 #7. Presented to a meeting of the MAA, Peoria, IL, 8–9 May 1925.

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1927b Conditions for mathematical study in Italy. *Amer. Math. Monthly* 34:449 #1. Presented to a meeting of the MAA, Madison, WI, 5–6 Sept 1927.
1927c Curves in r-space invariant under a net of homographies containing the identity. *Bull. Amer. Math. Soc.* 33:387 #6. Presented to the AMS, Chicago, 15 Apr 1927.
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1931 Reorganization of material for freshman mathematics. *Amer. Math. Monthly* 38:427 #1. Presented to a meeting of the MAA, Peoria, IL, 1–2 May 1931.
1936 The mathematics which is included in the physical science general course at the University of Chicago under the new plan. *Amer. Math. Monthly* 43:149 #9. Presented to a meeting of the MAA, Decatur, IL, 3–4 May 1935.
1937 The logical structure of four-dimensional space. *Amer. Math. Monthly* 44:348 #1. Presented to the MAA and the Indiana Philosophical Association, Greencastle, IN, 30 Apr 1937.

Presentations not listed above:
Reorganization of material for freshman mathematics. Principal speaker at meeting of the MAA, Lexington, KY, 9 May 1931.
The master's thesis. Presented to the MAA, Los Angeles, 29 Aug 1932.
Non-technical functions of mathematics. Presented to meeting of the Central Association of Science and Mathematics Teachers, 1935.
Off the beaten Path. Presented to the NCTM, Chicago, 20 Feb 1937.

References to: AmMSc 4–8, 9P–11P; AmWom 1935–40; BiDWSci; BioWMath.
"Former U. of C. Math Teacher Dies at Age 86." *Chicago Tribune*, 6 Jul 1967.

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