KENDALL, Claribel. January 23, 1889–April 17, 1965.

University of Colorado (BA 1912, BED 1912, MA 1914), University of Chicago (PhD 1921).

Claribel Kendall was born in Denver, Colorado, the daughter of Emma Gano (Reily) (b. 1859) and Charles Martin Kendall (1860–1906). The 1900 census indicates that both of her parents were born in Ohio and that her father was a lawyer. However, later census reports show her father as having been born in New York State, and that is confirmed by additional information. He graduated from Yale University in 1883 before moving to Colorado, where he married in 1887. In 1900 Claribel Kendall had one living sister, Florence (1890–1971); another sibling had died earlier. Emma Kendall, a widow, and her two daughters moved from Denver to Boulder in about 1910. According to census records, Claribel and her mother were living together in 1920 and 1930.

Claribel Kendall received both her elementary and secondary education in the Denver public schools. She entered the University of Colorado in Boulder in 1907 and earned both a bachelor of arts and a bachelor of education degree in 1912. It appears that she taught in public school at least a year before her graduation, most likely in 1908–09. During 1911–13, her senior year and her first year as a graduate student, she was an assistant in mathematics at Colorado. She became an instructor in 1913, one year before earning her master's degree in mathematics, having studied with Saul Epsteen and Ira M. DeLong. After receiving her master's degree, Kendall did graduate work at Colorado during the summers with visiting faculty Abraham Cohen and B. F. Finkel. During the summers of 1915 and 1918 and from the summer of 1920 to the summer of 1921 she studied at the University of Chicago with G. A. Bliss, L. E. Dickson, E. H. Moore, and E. J. Wilczynski. During her first two summers she had scholarships; during her extended period of residence she had a fellowship. She received her PhD from Chicago in September 1921.

Claribel Kendall's sister, Florence, entered the University of Colorado in 1909. She received a bachelor's degree in physics in 1913, after which she was an instructor of mathematics at the university for at least a year. Later, in 1926, she received a master's degree in mathematics from Colorado with a thesis, "The problem of two and three bodies in celestial mechanics." She was a high school teacher in Salida, Colorado, in 1920 before moving to Trinidad, Colorado, where she spent most of her career as a high school mathematics teacher.

Claribel Kendall remained at the University of Colorado for her entire career except for 1920–21, the year she had a leave to study at Chicago, and the summer of 1925, when she taught at the University of California. She was promoted from instructor to assistant professor in 1922, to associate professor in 1928, and to professor in 1943, and was the first woman to become a professor of mathematics at Colorado. She served as acting chairman of the department 1954–55. She retired in 1957 as professor emeritus.

In 1913, a year before she received her master's degree, a problem contributed by Kendall on calculus was published in the *American Mathematical Monthly*. A few years later, during 1916 and 1917, several of her solutions to problems in the *Monthly* were also published. In 1916 she was listed as a charter member of the MAA, and the following year she was one of fifteen MAA members to attend a meeting to organize

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the Rocky Mountain Section of the MAA. During the summer of 1928, Kendall and her sister attended the International Congress of Mathematicians in Bologna, where Claribel Kendall was a delegate from the university. Kendall directed the master's theses of nine or ten students; one, in 1924, when she was an assistant professor is not certain since the department did not list master's advisors until 1928. After that time she advised three as an associate professor and six as a professor, the last one in 1955, two years before her retirement. Among these advisees were at least six women. In addition to her work in the mathematics department, Kendall was active on various committees in the university. Her obituary lists her service as secretary of the College of Arts and Sciences committee with power to act on degrees, her chairmanship of the Bigelow scholarship committee, her work with the Associated Women Students (AWS) as secretary of their loan and scholarship committee, and her serving as advisor to the AWS senate, Mortar Board, and the university Christian Science group.

Kendall was a member of Kappa Delta Pi, an education honorary society. She was active in the MAA through its Rocky Mountain Section and was president in 1930. She presented papers at meetings of the section in the period 1922–42; they included several expository papers and the master's thesis of one of her students. She was secretary of the Alpha of Colorado chapter of Phi Beta Kappa 1922–64, and a scholarship in her honor was established by the chapter. She was also secretary, as well as treasurer and president, of the Colorado Mountain Club. She also had an interest in bird watching, and at least twice in the 1920s she helped compile the Boulder Christmas bird census for the Audubon journal, *Bird-Lore*. She held various offices, including second reader 1944–47, in the First Church of Christ, Scientist, in Boulder.

Claribel Kendall was joined in her home in Boulder by her sister, Florence, after Florence retired in 1956. This was the same residence Claribel had shared with her mother at the time of the 1930 census. The sisters remained in their home in Boulder after Claribel Kendall's retirement in 1957. Claribel and Florence Kendall both served on the hospitality and recreation committee for the NCTM summer meeting in Greeley, Colorado, in August 1958.

Claribel Kendall died in 1965 at age seventy-six in Boulder. Both her local Phi Beta Kappa chapter and her local church were remembered generously in her will. Florence Kendall was eighty when she died in 1971, and contributions in her memory were requested to be sent to the Claribel Kendall Memorial Fund, in care of Phi Beta Kappa at the University of Colorado.

Organizational affiliations: AMS, MAA (charter member), NCTM, Phi Beta Kappa, Sigma Xi.

## Thesis and dissertation:

 ${\bf 1914}\,$  Preassociative syzygies in linear algebra. MA thesis, University of Colorado.

1921 Congruences determined by a given surface. PhD dissertation, University of Chicago, directed by Ernest Julius Wilczynski. Private edition, 1923, distributed by the University of Chicago Libraries, reprinted from Amer. J. Math. 45:25–41.

## **Publication:**

1923 Congruences determined by a given surface. Amer. J. Math. 45:25–41. Published version of PhD dissertation. Reviews: JFM 49.0519.01 (M. Langally); Rev. semestr. publ. math. 31, pt. 1: 2–3 (E. B. Cowley). Presented as "Certain congruences determined by a given surface" to the AMS, St. Louis, MO, 26 Nov 1921; abstract: Bull. Amer. Math. Soc.

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28:145-46 #1. Also presented under that title to a meeting of the MAA, Greeley, CO, 14-15 Apr 1922; abstract: Amer. Math. Monthly 29:198 #1.

## Abstracts not listed above:

1923a with G. W. Smith. Certain associativity conditions in linear algebras. *Amer. Math. Monthly* 30:219–20 #1. Presented to a meeting of the MAA, Boulder, CO, 30–31 Mar 1923. 1923b with G. W. Smith. On the conditions for associating in linear algebras. *Bull. Amer. Math. Soc.* 29:125–26 #2. Presented to the AMS, Lawrence, KS, 2 Dec 1922.

1930 Foci of algebraic curves. Amer. Math. Monthly 37:394 #3. Presented to a meeting of the MAA, Denver, CO, 11–12 April 1930.

1933 On foci of algebraic curves with applications to cubic curves (Thesis presented by Ethel A. Rice for MA University of Colorado). *Amer. Math. Monthly* 40:387–88 #2. Presented by C. Kendall to the MAA, Fort Collins, CO, 14 Apr 1933.

1936 The projective generation of curves and surfaces. Amer. Math. Monthly 43:591 #9. Presented to a meeting of the MAA, Denver, CO, 17–18 Apr 1936.

1939 Morley triangles. Amer. Math. Monthly 46:532 #8. Presented to a meeting of the MAA, Laramie, WY, 28–29 Apr 1939.

1942 Constructions by means of a marked ruler and other instruments. Amer. Math. Monthly 49:512 #13. Presented to a meeting of the MAA, Golden, CO, 17–18 Apr 1942.

References to: AmMSc 4–8, 9P–10P; AmWom 1935–40; BiDWSci; BioWMath; "Claribel Kendall, Retired CU Mathematics Professor, Dies." *Boulder Daily Camera*, 18 Apr 1965.

Struik, Ruth Rebekka. "Claribel Kendall (1889–1965)." In Women of Mathematics: A Biobibliographic Sourcebook, eds. Louise S. Grinstein and Paul J. Campbell, 92–94. Westport, CT: Greenwood Press, 1987.

Other sources: PhD dissertation vita 1923; Owens questionnaire 1937; communications with Boulder Public Library and Yale University Archives; Jones and Thron, A History of the Mathematics Departments of the University of Colorado; "Florence Kendall," (Obituary) Boulder Daily Camera, 10 May 1971; US Census 1900, 1910, 1920, 1930 CO.

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