FARNUM, Fay. August 24, 1888–March 11, 1977.

IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS (BS 1909), CORNELL UNIVERSITY (MA 1915, PhD 1926).

Eugenia Fae Farnum, born in Spencer, Iowa, was the second of four children of Josephine (Jacobs), born in 1857 in New York State, and George Edwin Farnum, born in 1851 in New Hampshire. Her parents married in about 1875, and her father was a farmer in northwestern Iowa at the time of the 1900 census. Her siblings were an older brother, Roswell (1886–1917), and younger sisters, Anna (b. 1892) and Martha B. (b. 1894). In 1920 the family was living in Ames, Iowa, where Fay was an instructor at Iowa State College, Anna did clerical work for the Treasury Department in Washington, D.C., and Martha was a college chemistry instructor. Subsequently, Martha Belle Farnum received an MA in biology in 1922 and a PhD in biochemistry in 1926 from the University of Chicago.

Farnum graduated with a degree in general science from Iowa State College of Agriculture and Mechanic Arts (now Iowa State University of Science and Technology) in 1909. Between 1909 and 1914 she taught in high schools in Lyons, LeMars, and Ames, Iowa. She attended Cornell University 1914–15 and received her master's degree in 1915 having written her thesis using the name Fae Farnum. By the late teens she used only the name Fay Farnum.

Farnum then returned to Iowa where she was an instructor at Iowa State 1915–24. She attended the University of Chicago during the summers of 1921 and 1922. She returned to study at Cornell during 1924–25 and registered only for thesis supervision with Virgil Snyder in 1925–26. During her final year, Farnum was an instructor and taught two classes per semester including solid geometry, advanced algebra, and calculus. She received her doctorate in 1926 with her major subject geometry, her first minor mathematical analysis, and her second minor physics.

Soon after receiving her doctorate, Farnum began a lengthy period of teaching at Washington Square College, New York University. She served as instructor 1926–28 and then as assistant professor. During her early years at NYU, Farnum often taught two graduate courses a semester, mainly geometry but sometimes algebra or calculus of variations. By the mid-1930s she was more likely to teach two undergraduate courses and one graduate course. One of her students at NYU was Gertrude Blanch, for whom Farnum served as a reference when Blanch applied to Cornell for graduate school. During 1939–40 Farnum took a leave of absence from NYU to study at the Physics and Mathematics Institute in Copenhagen. She reported to her father in Ames, Iowa, on the April 1940 Nazi invasion of Denmark and described her trip back to the United States via Berlin, Munich, the Brenner Pass, Milan, and Genoa, where she took the USS Manhattan to New York.

Farnum returned to NYU after her leave and taught for at least one more year, 1940–41; both the undergraduate and graduate bulletins list her as scheduled to teach 1941–42. In 1943 she returned to the faculty of Iowa State, primarily to help the mathematics department meet the extra teaching required by the naval and army students. She was an assistant professor from 1943 to 1949, when she retired, and taught again as assistant professor 1955–57.

Farnum was living at least part time in Tucson, Arizona, by about 1952. In 1957 she was appointed assistant professor at the University of Arizona and that year,

Book Web Page FARNUM - 2

at age sixty-nine, rejoined the MAA, having let her membership lapse in the early 1940s. She died in Tucson at age eighty-eight and was survived by cousins. Her obituary reported that she was a member of the First Congregational Church and the AAUW and that she was buried in Tucson Memorial Park South Lawn.

Organizational affiliations: AMS, MAA (charter member), AAUW, Sigma Xi.

## Thesis and dissertation:

1915 Cavalier perspective and orthogonal axonometry. MA thesis, Cornell University. Typescript.

1926 On triadic Cremona nets of plane curves. PhD dissertation, Cornell University, directed by Virgil Snyder. Typescript. Printed version, 1928, reprinted from Amer. J. Math. 50:357–70.

## **Publications:**

1919 with J. R. Sage, Jr. Algebra Review: Examples with a few Rules and Suggestions. Ames, IA: The Torch Press.

1928 On triadic Cremona nets of plane curves. Amer. J. Math. 50:357–70. Published version of PhD dissertation. Reviews: JFM 54.0686.01 (W. Fr. Meyer); Rev. semestr. publ. math. 34, pt. 1: 4 (W. G. J. ten Pas). Presented to the AMS, Columbus, OH, 9 Sep 1926; abstract: Bull. Amer. Math. Soc. 32:598 #60.

## References to:

"Ames Woman Describes Nazi Invasion of Denmark." Ames Daily Tribune, 1940.

"Letter from the War Territory by Miss Farnum." Ames Daily Tribune, 18 Apr 1940.

"Dr. Fay Farnum Today." Ames Daily Tribune, 11 Feb 1943.

"Perotti, Farnum Fill Math Posts." Ames Daily Tribune, 29 Sep 1943.

Farnum, Fay. (Death notice) Arizona Daily Star, 14 Mar 1977.

"Fay Farnum." (Obituary) Ames Tribune, 17 Mar 1977.

Other sources: Division of Rare and Manuscript Collections, Cornell University Library; New York University Archives; communications with Iowa State University Alumni Association, Iowa State University Archives, and Tucson-Pima Public Library; US Census 1900, 1920 IA, 1930 NY.

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