BLACK, Florence. November 22, 1889–September 13, 1974. UNIVERSITY OF KANSAS (BA 1913, MA 1921, PhD 1926).

Florence Lucile Black was born in Meade County, Kansas, the fourth of five children of Mary Ella (Winslow) (b. 1852) and Moses Black (b. 1845), both natives of Illinois. Moses Black was a land surveyor and rancher. The children were Zada (b. 1878), Ernest (1882–1949), and Ethel (b. 1884), all born in Illinois, and Florence and Frances (b. 1891), born in Kansas. Her brother, Ernest Bateman Black, became a well-known consulting engineer in Kansas City who in 1942 was president of the American Society of Civil Engineers.

Florence Black grew up on a cattle ranch in southwestern Kansas. She described her earliest years in "Life on the Cattle Range in the Early Days of Western Kansas, or Moses Moves to Kansas," which is included in G. Baley Price's history of the Kansas mathematics department (Appendix VII, 736–45). When she was very young she lived in a large one-room sod house. Her earliest school consisted of her father or sister Zada as teacher, and four students: the two youngest Black girls and two neighbor children, all four of whom later graduated from the University of Kansas.

Black attended the University of Kansas in Lawrence and graduated in 1913. After her graduation, she taught for two years at the high school in Anthony, Kansas, and for three years at a high school in Wichita. In 1918 she returned to the university as instructor in mathematics and remained on the faculty until her retirement. Initially she also took graduate courses and received her master's degree in 1921 and her PhD with a minor in physics in 1926, the same year that Wealthy Babcock earned her doctorate at Kansas.

Having earned her PhD, Black was promoted to assistant professor in 1926. As was the case with her colleague and friend Wealthy Babcock, she was promoted to associate professor in 1940. She retired as associate professor emeritus in 1960.

Price notes in his department history that "many will remember Professor Black best as an outstanding teacher..." (p. 747). Upon her retirement the Florence Black Excellence in Teaching Award was established to provide a gift to the best teacher among the mathematics department's first-year assistant instructors. The university also awards a Florence Black scholarship, and, in its 2005 annual report, the College of Liberal Arts and Sciences announced the establishment of the Florence Black and Wealthy Babcock Professorship in Mathematics. Black's other contributions to the University of Kansas included her serving as a member of the university's committee on scholarships for twenty years, as secretary of the college faculty for nineteen years, as faculty advisor of the women's pep club from its founding until 1952, and as treasurer of the Women's Faculty Club and of the University of Kansas chapter of Sigma Xi. She was also a faithful attendee at meetings of the Kansas Section of the MAA.

A paper read by Price at her memorial service noted her many extracurricular interests: horseback riding, camping, swimming, tennis, and traveling. He said, "In a recent letter former chancellor Deane W. Malott, now president emeritus of Cornell University, wrote as follows: 'I remember once offering her camping rights in the center of the Cornell campus, should she and Wealthy desire to come'" (Price 1976, 747). She and Wealthy Babcock were known, too, for their extraordinary attendance at football and basketball games at the University of Kansas. She was

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remembered twenty-five years after her death "as a dedicated Jayhawk sports fan" in the Lawrence Journal-World.

Among her travels were two trips to Alaska. At age eighty she made a trip to the Mediterranean, Tanzania, Uganda, and Kenya. In 1973 Black was elected to the Faculty Women Hall of Fame by the Commission on the Status of Women.

Florence Black died in Lawrence, Kansas, at age eighty-four in 1974. She was cremated and her ashes were buried in the Pioneer Cemetery on the University of Kansas campus.

 ${\bf Organizational \ affiliations:} \ {\rm AMS, \ Sigma \ Xi}.$ 

## Thesis and dissertation:

1921 Methods of generating plane cubic curves. MA thesis, University of Kansas.

1926 A reduced system of differential equations for the invariants of ternary forms. PhD dissertation, University of Kansas, directed by Ellis Bagley Stouffer. Printed version, 1929, reprinted from *Univ. Kansas Sci. Bull.* 19, no. 2: 17–25.

## **Publication:**

1929 A reduced system of differential equations for the invariants of ternary forms. *Univ. Kansas Sci. Bull.* 19, no. 2: 17–25. Published version of PhD dissertation. Presented to the AMS, St. Louis, MO, 26 Nov 1927; abstract: *Bull. Amer. Math. Soc.* 34:19 #3.

## Abstract not listed above:

1944 A correspondence refresher course for mathematics teachers. Amer. Math. Monthly 51:181 #1. Presented to the MAA, Lawrence, KS, 10 Apr 1943.

## References to: BiDWSci.

Gray, Mary. "In Memoriam: Florence Black." AWM Newsletter 5 (Jan 1975): 4. "Sept 15 – 25 Years Ago." Lawrence Journal-World, 15 Sep 1999.

Other sources: NatCAB 37 (Black, Ernest Bateman); Price, History of the Department of Mathematics of the University of Kansas; US Census 1900, 1910, 1920 KS.

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