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# **Black History Month: Notable Mathematicians**



#### **Benjamin Banneker** (1731-1806) Self-taught mathematician, astronomer, almanac writer, inventor and surveyor

While Banneker's first major accomplishment was building a wooden clock at 21 years-old, he is most known for his self-taught astronomy and calculation skills and surveying the land that would later become our national capital, Washington D.C.

Banneker published his astronomical observations in almanacs, which were useful for farmers and fishermen. He also wrote letters to politician Thomas Jefferson advocating against slavery.

### **Katherine Johnson (1918-2020)** Mathematician for NASA space missions

Johnson worked for NACA/NASA's Langley laboratory for 33 years as one of several Black women "computers." While at NASA, Johnson calculated the trajectory analysis for the Freedom mission 7 in 1961, America's first human space flight; she calculated orbital equations for the Friendship mission 7 in 1962, America's first orbital space flight; and she provided calculations to coordinate Project Apollo's lunar module with the command and space module, which lead to the Apollo 11 mission in 1969, the first moon landing, and more.

Johnson and three other mathematicians/engineers, Dorothy Vaughan, Mary Jackson and Christine Darden were highlighted in the 2016 book *Hidden Figures*.



#### **J. Ernest Wilkins Jr. (1923-2011)** Mathematician and physicist who contributed to the Manhattan Project

Wilkins' career in math and nuclear physics spanned nearly 60 years. The former math teacher worked on the Manhattan Project. His neutron energy research in uncovered three scientific effects: the Wilkins effect, the Wigner-Wilkins spectra and the Wilkins spectra.

Wilkins worked on finding peaceful uses for atomic energy. His other noteworthy contributions include founding Howard University's doctoral mathematics program and designing and testing optical and ophthalmologic uses for microscopes and telescopes for the American Optical Company.

## **Robert ''Bob'' Moses (b. 1935)** Math Educator and Civil Rights Activist

Moses, a Harlem native, is a notable 1960s civil rights activist and math teacher who founded and is president of <u>The Algebra Project</u>, a national educational initiative to encourage public middle and high school students to learn algebra, improve their grades and prepare for college-level mathematics.

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