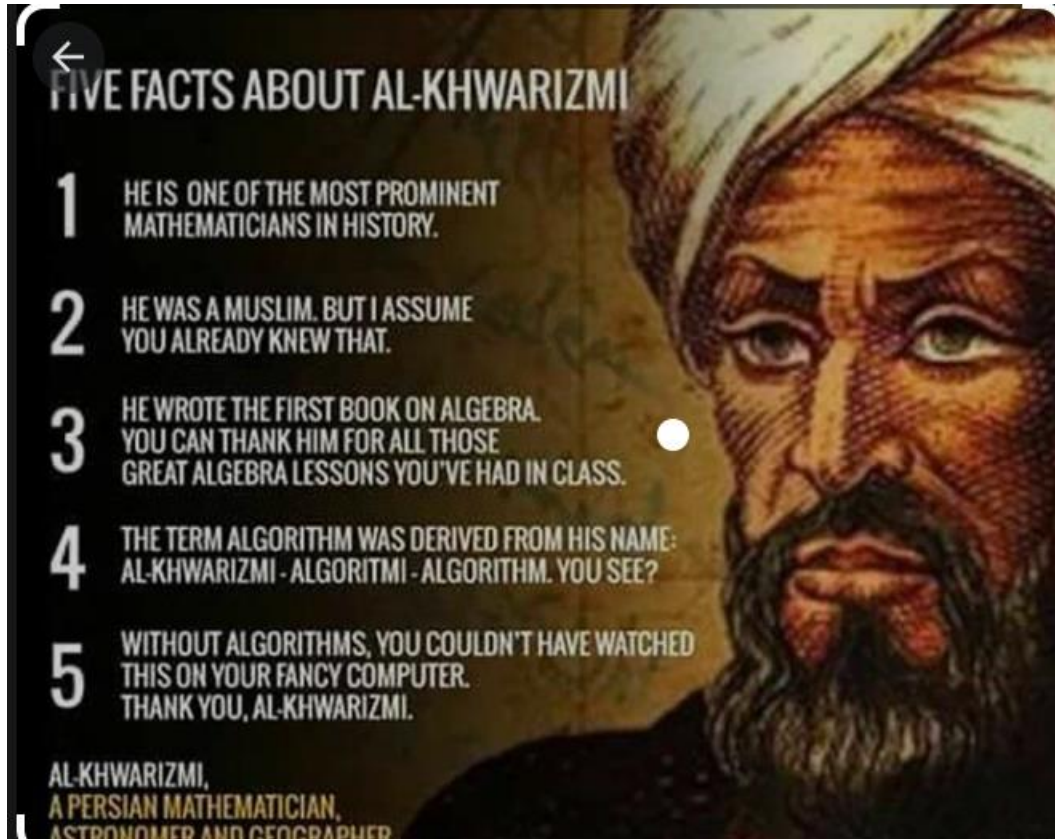


Al-Khwarizmi: The Father of Algebra



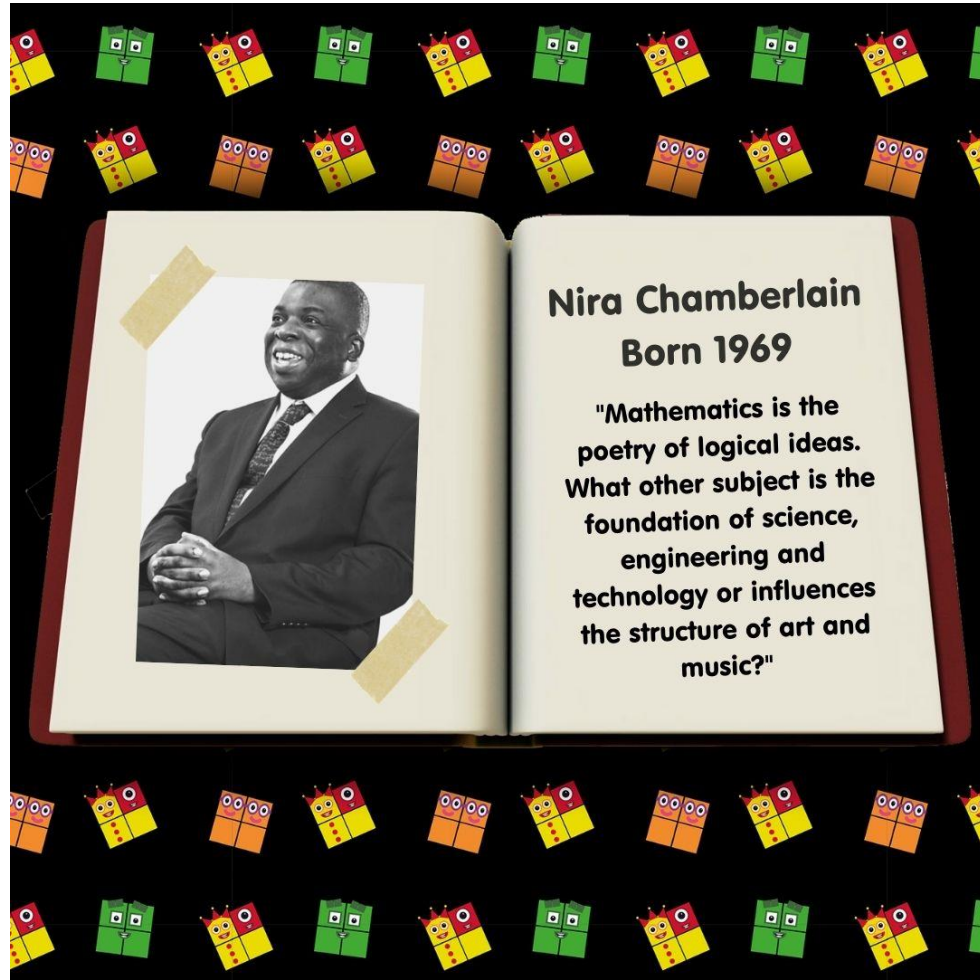
- Muhammad ibn Musa al-Khwarizmi was a 9th-century Muslim mathematician and astronomer.
- He is known as the “father of algebra”, a word derived from the title of his book, Kitab al-Jabr.
- His pioneering work offered practical answers for land distribution, rules on inheritance and distributing salaries.
-

He also developed the concept of the algorithm in mathematics, which is why some have called him the “grandfather of computer science”.

- Khwarizmi was one of the most famous scholars of Bayt al-Hikma (The House of Wisdom), Baghdad’s intellectual powerhouse.

Nira Chamberlain

- Nira Chamberlain was born on the 17th of June in 1969. How old is he now?
- He is based in Birmingham and was born in the UK. His parents were from Jamaica.
- As a young person he had a dream that one day he would become some type of super mathematician! And his dream came true... He invented his own long multiplication method – Wow!
- He has more than 25 years of experience of writing mathematical models and algorithms.
- He is listed by the Science Council as “one of the UK’s top 100 scientists.”
- He says “you don’t need anybody’s permission to be a great mathematician!”



Katherine Johnson



- Katherine Johnson was born on August 26 in 1918 and died this year in February aged 101.
- She was a physicist (a type of scientist) and a mathematician.
- She was 1 of the first 3 black people allowed to study at West Virginia University. Before then, black students were not allowed to study there.
- She worked as a physicist at NASA in America and her work made it possible for many space flights such as Apollo 11 flight to the moon to happen.
- Her mathematical calculations were very important for the missions to space to be successful.

"Girls are capable of doing *everything* men are *capable* of doing. Sometimes they have more *imagination* than men."
- Katherine Johnson

#BeLikeHer



Srinivasa Aiyangar Ramanujan



- Born 22 December 1887
- Died 26th April 1920 - India.
- **Ramanujan** made substantial contributions to the analytical theory of numbers and worked on elliptic functions, continued fractions, and infinite series
- Ramanujan's knowledge of mathematics (most of which he had worked out for himself) was startling. Although he was almost completely unaware of modern developments in mathematics, his mastery of [continued fractions](#) was unequaled by any living mathematician.

Dorothy Vaughan



- Born on September 20, 1910 in America, Dorothy Vaughan studied mathematics and French at university in 1929.
- She became a maths teacher in a high school and got married and had six children.
- From 1949 to 1958, Dorothy Vaughan was NASA's first African American manager.
- She was hired to look at research data after World War II for NASA. She was part of a group of black women who provided information to engineers. They worked with white colleagues but had segregated dining, bathroom and living quarters.
- Dorothy supported and lobbied for promotions of women, regardless of their race.
- A film called Hidden Figures was made recently about the lives of three African American ladies, including Dorothy, at NASA whose maths skills were used on space missions including an orbital flight around the Earth.

“Separate and equal are two different things. Just 'cause it's the way, doesn't make it right.”

Kathleen Adebola Okikolu

- Kathleen Adebola Okikolu was born in 1965 in England.
- She is a British mathematician and comes from a very mathematical family. Her British mother was a maths teacher. Her Nigerian father was a research mathematician.
- She studied a maths degree at Cambridge University and then went on to study for a PhD at the University of California.
- She is now working as a professor of mathematics at John Hopkins University in the US where she is carrying out research into space.

