

Mathematicians Who Have Made a Difference

Muhammad Ibn Musa al-Khwarizmi

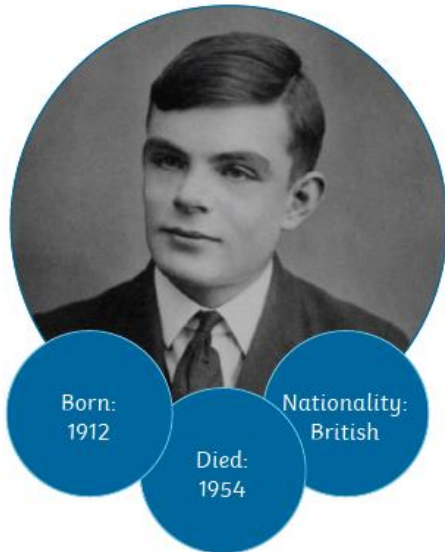


Area of expertise: Hindu-Arabic numerals and algebra

Best known for:

- his contributions to mathematics, geography and astronomy established the basis for the revolution in algebra and trigonometry.
- his strong advocacy for the Hindu numerical system.

Alan Turing



Areas of expertise: Codebreaking and early computer theory

Best known for:

- inventing a test called the Turing Test used to determine a machine's level of intelligence;
- inventing Turing machines – theoretical computers;
- his work at Bletchley Park during World War Two: the team that cracked the German Enigma code.

Marjorie Lee Browne



Born: 1914

Nationality: American

Died: 1979

Area of expertise: Mathematics Educator

Best known for:

- being one of the first African-American women to receive a Ph.D. in mathematics.
- serving as a member on various educational boards such as the American Mathematical society and the Women’s Research Society.

Sir Isaac Newton



Born: 1642

Nationality: British

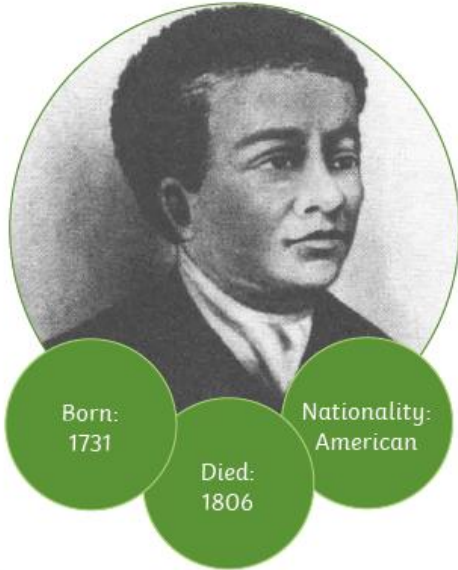
Died: 1726

Areas of expertise: Calculus, gravitational theory, mechanics

Best known for:

- devising the theory of gravity after being hit by an apple on the head;
- inventing calculus;
- using mathematics to explain gravity and motion.

Benjamin Banneker



Area of expertise: Mathematics and astronomy

Best known for:

- his successful prediction of a solar eclipse.
- publishing his own almanac (calendar of events).
- being part of a team that surveyed and planned the capital of the United States.
- building the first ever fully wooden clock.

Leonardo of Pisa (Fibonacci)



Area of expertise: Number systems

Best known for:

- playing a key role in introducing the Hindu number system to Europe;
- giving his name to the sequence of numbers which is created by adding the previous two numbers together.

Carl Friedrich Gauss



Areas of expertise: number theory, algebra, physics

Best known for:

- finding a quick method to add the numbers 0-100 together whilst attending primary school;
- his work on prime numbers;
- proving the fundamental theorem of algebra.

Florence Nightingale



Areas of expertise: Statistics and nursing

Best known for:

- changing nursing practises;
- making statistics easier for politicians to understand by developing ground-breaking graphs and charts.