- I was born in Florence, Tuscany on the 20<sup>th</sup> of May, 1820 and died on the 13<sup>th</sup> of August, 1920 in London.
- In 1859, I was elected the first female member of the Royal Statistics Society.
- 3. I was a pioneer of data visualisation, and created the polar area diagram, a circular histogram.
- 4. I became a nurse in 1844.
- 5. I used data visualisations to demonstrate the importance of sanitation and hygiene in British army hospitals during the Crimean War, and later in India.
- 6. I am known as "the lady with the lamp".



- I was born in White Sulphur Springs, West Virginia on the 26<sup>th</sup> of August, 1918 and died on the 24<sup>th</sup> of February, 2020.
- 2. I was awarded the Presidential Medal of Freedom in 2015.
- 3. I was the first African-American woman to attend graduate school at West Virginia University.
- I was hired as a mathematician by the National Advisory Committee for Aeronautics in 1953 – at the time, my workplace was segregated.
- I worked as a human computer for NASA: my calculations of orbital mechanics were critical to the success of US crewed spaceflights.
- 6. My work, with Mary Jackson and Dorothy Vaughan, was portrayed in the 2016 film, Hidden Figures.



- I was born in London on the 20th of December, 1815 and died on the 27th of November, 1852.
- I was a student of Mary Somerville, the Scottish scientist, writer and polymath.
- 3. I have been called "the first computer programmer".
- 4. This title arises from my notes on Charles Babbage's Analytical Engine, which include a detailed algorithm for calculating a sequence of Bernoulli numbers using the engine.
- 5. I was the daughter of the poet Lord Byron, although he left England shortly after I was born and died when I was eight.



- I was born on the 1st of August 1976 in Hampshire, England and am currently a scientist-in-residence at the School of the Art Institute of Chicago.
- My research is in higher category theory, but I am also interested in combatting math phobia and communicating mathematics to nonmathematicians.
- I have written 13 books and use baking to explain mathematical concepts - I appeared on the Late Show with Stephen Colbert and made a mille-feuille to demonstrate exponentiation.
- I am also an accomplished concert pianist, specialising in lieder and art song.

- I was born on the 2nd of January, 1938 in New York and currently live in Michigan.
- 2. I worked for IBM between 1964 and 1968, where I worked on very large scale integrated microchip design.

  After disclosing my intention to transition gender, I was fired. In 2020, 52 years afterwards, IBM apologised for firing me.
- 3. I have five patents, issued between 1991 and 1998.
- I was inducted into the National Inventors Hall of Fame in 2023, and have Honorary Doctorates at Princeton University, the University of Michigan, Ann Arbor, and other institutions.



- I was born on the 23rd of March, 1882 in Erlangen, Bavaria and died on the 14th of April, 1935 in Bryn Mawr, Pennsylvania.
- 2. I wrote my dissertation (completed in 1907) at the University of Erlangen.
- 3. From 1908-1915 I taught at the University of Erlangen without pay.
- 4. I worked at the University of Göttingen with David Hilbert and Felix Klein; my lectures were often advertised under Hilbert's name.
- I am best known for my first and second theorems, which describe the connection between symmetry and conservation laws.
- 6. I am also known for my contributions to abstract algebra and my work on the theory of ideals.



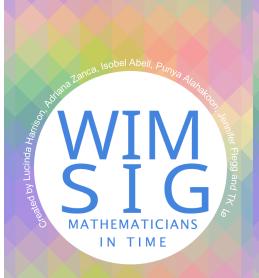
- 1. I was born in 1890 and died in 1954.
- 2. I obtained my PhD in mathematics from the University of Illinois at Urbana-Champaign in 1919.
- 3. While working at the University of Texas, I met geneticist Hermann Joseph Muller, who was looking for a mathematical collaborator on a model of genetic mutation in *Drosophila* flies. We married in 1923.
- My teaching appointment was terminated after I gave birth to my first child, as the University did not believe I could both work and be a mother.
- I continued to collaborate with my first husband - he later won a Nobel prize for research he performed with my assistance.

- I was born on the 8th of September, 1933 in Cót, in the Tù Liêm District of Vietnam and currently live in Hanoi.
- 2. I became the first female full professor in any scientific or technical field in Vietnam.
- 3. In 1988 I founded the first private university in Vietnam, Thang Long University in Hanoi.
- I hand wrote my thesis on algebraic structures, which was completed via correspondence with Paris Diderot University from Vietnam.
- In 2003 I was awarded France's Ordre des Palmes Académiques for promoting cooperation in culture between France and Vietnam.

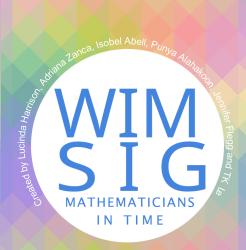
- 1. I was born in Jerusalem on the 5th of July, 1986 and moved to Australia at age 8.
- 2. I completed my Bachelor of Mathematics and Finance at University of Technology, Sydney in 2009.
- In 2012 I was appointed the Numeracy Ambassador for National Literacy and Numeracy Week.
- 4. I also published my first book in 2012, a book of maths puzzles.
- 5. I am the first mathematician to be featured in Australian Vogue.
- 6. From 2010-2012 I co-hosted *Letters* and *Numbers*, a popular game show on SBS.





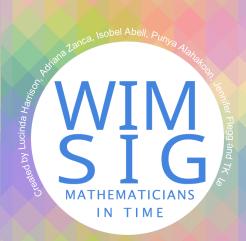


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- 1. I lived in China during the Qing dynasty.
- 2. I am known for my contributions to astronomy, mathematics and poetry.
- I authored many scientific books and articles, including "The Explanation of a Solar Eclipse", which details the findings of an experiment involving a hanging crystal lamp (the sun), a round table (the Earth) and a mirror (the moon).
- 4. I was largely self-taught in a time when women were excluded from science education. In one of my poems, I wrote:

It's made to believe, Women are the same as Men; Are you not convinced, Daughters can also be heroic?



- 1. I was born on the 29th of January, 1951 in Lagos, Nigeria, and currently live in Ibadan, Nigeria.
- In my early 20s, while raising two children, I completed my PhD on sample path properties of Brownian motion at University College London.
- 3. I was the first Nigerian woman to be awarded a PhD in mathematics and the first Nigerian woman to become a Professor in mathematics.
- I have extensively studied the Black-Scholes Pricing Model, frequently used for estimating the future value of financial assets.
- 5. In 2017 I was made a Fellow of the Mathematics Association of Nigeria.



- 1. I was born in Paris on the 1st of April, 1776 and died on the 27th of June, 1831
- As women were barred from tertiary maths education I accessed lecture notes and corresponded with faculty member Joseph Louis Lagrange using a pseudonym.
- I also used a pseudonym to correspond on number theory with Adrien-Marie Legendre and Carl Friedrich Gauss.
- On my third attempt, I was the first woman to be awarded a prize by the Paris Academy of Sciences for my article titled Research on elastic surface theory.





- 1. I was born on the 29th of October, 1932 in Brooklyn and died on the 16th of June, 2005 in Manhattan.
- I contracted polio as a child and due to resulting disability, I was institutionalised throughout childhood.
- 3. I was awarded a PhD in mathematics from New York University in 1972.
- 4. I won the George Pólya Award from the Mathematical Association of America in 1978 for my work on the Cylinder Area Paradox.
- I joined the group Disabled in Action in the 1970s and successfully campaigned to make public transport and buildings wheelchair accessible.

- 1. I was born in 1977 in Iran and died in 2017 at the age of 40.
- 2. I obtained my PhD at Harvard University in 2004.
- 3. I was a professor of mathematics at Stanford University from 2009 until my death.
- My research areas include hyperbolic geometry, ergodic theory, and symplectic geometry.
- AustMS has established an award in my name to support international postgraduate female students.
- 6. I am the first woman to win the Fields Medal for mathematics.

- 1. I was born in 1914 in Vienna, Austria and died in 2000.
- 2. I was an actress, mathematician, scientist, and innovator.
- I co-invented and patented the "Secret Communication System" during WWII with composer George Antheil. This was a radio guidance system for torpedoes.
- 4. My work serves as a foundation for WiFi, GPS, and Bluetooth systems.
- I was awarded the Pioneer Award of the Electronic Frontier Foundation and Invention Convention's Bulbie Gnass Spirit of Achievement Award.







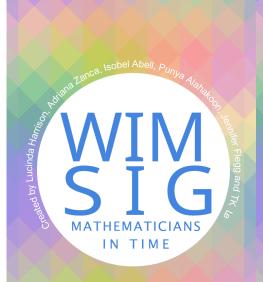
- It is estimated that I was born sometime between 350-370 CE in Alexandria, Egypt.
- I am best known for my work and teachings in philosophy, astronomy and mathematics.
- 3. My father was also a mathematician, however I have been described as excelling him in mathematics.
- 4. One of my pupils described me as "... a person so renowned, her reputation seemed literally incredible. We have seen and heard for ourselves she who honourably presides over the mysteries of philosophy".
- 5. I was murdered in 415 CE.

- 1. I was born in 1968 in New Zealand.
- 2. I am a professor of physics at the University of Toronto.
- 3. I am a nonbinary transgender person and use "they/them" pronouns.
- 4. I obtained my PhD from Stanford University in 1994.
- 5. My research fields include string theory and quantum field theory.
- 1. I was born in 1718 in Milan, Italy.
- 2. I was the eldest of 21 children.
- I was the first woman to write a mathematics handbook and the second woman ever to be granted a professorship at a university.
- 4. I am credited with writing the first book discussing both differential and integral calculus
- 5. There is a crater on Venus named after me.









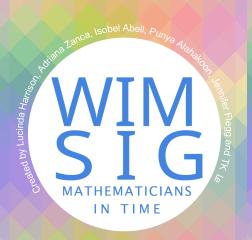
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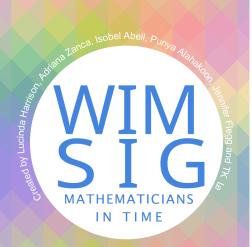


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- 1. I was born in Colac, Victoria, in 1929.
- In the mid-1960s, I worked on what became known as the Melbourne Poverty Survey, Australia's first systematic, quantitative measure of poverty.
- My research on the randomisation of electoral ballot papers led to change of the Commonwealth Electoral Act in 1984.
- 4. I also co-authored papers on theoretical chemistry.
- 5. I co-authored a 1960 paper with Ailsa Land that outlined the branch-and-bound method this method is a foundation of modern optimisation software. We deliberately published the paper using our initials, to hide our gender.

- After Euphemia Haynes in 1943, I was the second African American woman to earn a PhD in mathematics, in 1945.
- I held a postdoctoral fellowship at New York University and was an associate professor at Fisk University.
- I was hired by IBM in 1956, and worked on programs for IBM's Project Vanguard that tracked orbits of spacecraft.
- After returning to academia, I became interested in maths education and cowrote a textbook, "Theory and Applications of Mathematics for Teachers".

- I was born on the 19th of February, 1923 and died on the 2nd of July, 2017
- I am most famous for my discoveries of pentagonal tilings in geometry – including 58 unique types of pentagonal tiles.
- My highest educational qualification was my high school diploma, which included a single course in mathematics.
- 4. As a San Diego mother of five, I was a keen reader of a long-running puzzle column in *Scientific American*, of which my son was a subscriber. It was this column that inspired my research of pentagonal tilings.



- 1. I was born on the 11th of September, 1890, in Washington, D.C., and died on the 25th of July, 1980.
- In 1943, I became the first African American woman to earn a PhD in mathematics, with a dissertation titled The Determination of Sets of Independent Conditions Characterizing Certain Special Cases of Symmetric Correspondences.
- I taught in public schools for 47 years.
- 4. After I retired from the public school system, I was a professor of mathematics and the University of the District of Columbia, where I was chair of a department that I founded, dedicated to training African American teachers.

- 1. I was born on the 26th of January, 1780 in Jedburgh, Scotland, and died on the 29th of November, 1872.
- 2. I was well known in my lifetime for an 1831 translation of Laplace's *Mécanique Céleste* "from algebra into common language" it was set as textbook for undergraduates at the University of Cambridge until the 1880s.
- I also authored *Physical Geography*, the first textbook on the subject, which was still in use in the early 20th century.
- My signature was the first on an 1868 petition to give women the right to vote.
- I was a mathematics tutor and mentor of Ada Lovelace.

- 1. I was born in Leeds, England in 1957.
- In 1978, I joined Acorn Computers
   Ltd. I extended the BASIC
   programming language for the Acorn
   Proton microcomputer my work
   was part of a winning pitch to the
   BBC, who were producing a televised
   computer "Literacy Project".
- In the early 1980s, I also designed the instruction set for one of the first reduced instruction set computer (RISC) processors, the Acorn RISC Machine (ARM). This processor type became one of the most successful IP cores and by 2012 was being used in 95% of smartphones.
- I transitioned from male to female in 1994



- 1. I was born on the 9th of December, 1906, in New York City, and died on the 1st of January, 1992.
- Prior to joining the United States Navy in 1941, I was a mathematics professor at Vassar College.
- 3. When I retired, I held the rank of United States Navy rear admiral.
- I was an early proponent of machineindependent programming languages, and created the FLOW-MATIC language that was eventually extended to COBOL.
- In 1944, as a Navy reserve, I worked on the Harvard Mark I computer, used to run simulations of the implosion of the first atomic bomb as part of the Manhattan Project.

- I was born on the 2<sup>nd</sup> of March, 1901, and died on the 15<sup>th</sup> of April, 1984.
- My doctoral thesis (1926), "The Question of Finitely Many Steps in Polynomial Ideal Theory", supervised by Emmy Noether, is the foundational paper of computer algebra.
- As a philosopher, I was interested in the foundations of physics and the distinction between predictability and causality.
- 4. In 1935, I discovered a logical error in John von Neumann's proof of the impossibility of hidden variables in quantum mechanics. My work went unnoticed until the error was independently rediscovered in 1966 and a 1974 article acknowledged my

earlier research.

- I was born on the 23rd of April, 1933, in Birmingham, Alabama and died on the 25th of June, 2011.
- I was hired as a computer by the National Advisory Committee for Aeronautics (a precursor to NASA) in 1955, one of four African American employees of ~2,500.
- I developed code to simulate and study the effects of rocket launches on Earth's ozone layer.
- I also developed code to research alternative power technologies – this would later be used in hybrid vehicles and the Centaur upper-stage rocket, which in 1997 was used for the launch of the Cassini probe, to Saturn.





