

# EARLY FEMALE MATHEMATICIANS



**Hypatia**  
370 - 415

**Hypatia** was the first woman to make a substantial contribution to the development of mathematics. She was killed by a fanatical Christian sect.



**Maria Cunitz**  
1607 - 1664

**Maria Cunitz** was an astronomer who published simpler versions of Kepler's work.



**Elisabetha Koopman**  
1647 - 1693

**Elisabetha Koopman** was the wife of the Polish astronomer Johannes Hevelius and helped him with his observations.



**Émilie du Châtelet**  
1706 - 1749

**Émilie du Châtelet** was a French noblewoman who became important to mathematics as the translator of Newton's *Principia*.



**Laura Bassi**  
1711 - 1778

**Laura Bassi** was an Italian physicist and one of the earliest women to gain a professorship in an Italian university.



**Maria Agnesi**  
1718 - 1799

**Maria Agnesi** was an Italian mathematician who is noted for her work in differential calculus. She discussed the cubic curve now known as the 'witch of Agnesi'.



**Nicole-Reine Etale de Labrière**  
1723 - 1788

**Nicole-Reine Lepaute** was a French noblewoman who helped Lalande with astronomical calculations.



**Caroline Herschel**  
1750 - 1848

**Caroline Herschel** recorded the observations and did the calculations on the data of her astronomer brother William.



**Amélie Harlay**  
1768 - 1832

**Amélie Harlay** was a French astronomer who published navigational tables and catalogues of stars.



**Marie-Sophie Germain**  
1776 - 1831

**Sophie Germain** made a major contributions to number theory (in particular, the theory of primes), acoustics and elasticity.



**Mary Somerville**  
1780 - 1872

**Mary Somerville** wrote many works which influenced Maxwell. Her discussion of a hypothetical planet perturbing Uranus led Adams to his investigation. Somerville College in Oxford was named after her.



**Augusta Ada Lovelace**  
1815 - 1852

**Ada Lovelace** was a daughter of Lord Byron who became interested in Babbage's analytic engine and described how it could be programmed.



**Florence Nightingale**  
1820 - 1910

**Florence Nightingale** is best known for her work as a nurse, but she was also a pioneering statistician.



**Mary Everest Boole**  
1832 - 1916

**Mary Everest Boole** was an English mathematician who was married to George Boole. She wrote a number of books on mathematical education.



**Elizaveta Litvinova**  
1845 - 1919

**Elizaveta Litvinova** was the second woman to receive a Ph.D. in mathematics. A competent mathematician, she was denied the possibility to teach and research at high levels in Russia.



**Christine Ladd-Franklin**  
1847 - 1930

**Christine Ladd-Franklin** was an American psychologist, logician and mathematician who was one of the earliest women to work in American universities.



**Sofia Kovalevskaya**  
1850 - 1891

**Sofia Kovalevskaya** was a Russian born mathematician who made valuable contributions to the theory of differential equations. She finished her career in Sweden.



**Ellen Hayes**  
1851 - 1930

**Ellen Hayes** was an American mathematician and astronomer. She was one of the first female American professors.



**Charlotte Angas Scott**  
1858 - 1931

**Charlotte Angas Scott** studied at Cambridge but was not allowed to take her degree. After graduate work at Cambridge she became the first Head of Mathematics at Bryn Mawr College in Pennsylvania USA.



**Alicia Boole Stott**  
1860 - 1940

**Alicia Boole Stott** was a daughter of George Boole who made some discoveries in four-dimensional geometry.



**Winifred Edgerton Merrill**  
1862 - 1951

**Winifred Edgerton** was the first woman to receive a degree from Columbia University and the first American woman to receive a PhD in mathematics.



**Flora Philip**  
1865 - 1943

**Flora Philip** was a Scottish mathematician who studied at Edinburgh University and was among the first women to receive a degree there when they changed the rules. She was the first woman member of the Edinburgh Mathematical Society.



**Grace Chisholm**  
1868 - 1944

**Grace Chisholm Young** was an English mathematician who together with her husband William Young wrote many mathematical articles and several books.



**Philippa Fawcett**  
1868 - 1948

In 1890 **Philippa Fawcett** came top in the Mathematical Tripos Examinations at Cambridge, being placed "ahead of the first Wrangler".



**Henrietta Swan Leavitt**  
1868 - 1921

**Henrietta Leavitt** was an American astronomer who discovered the relation between the luminosity and the period of Cepheid variables. This was a vital step in measuring the distance to remote galaxies.



**Annie Scott Dill Maunder**  
1868 - 1947

**Annie Scott Dill Maunder** was a Northern Irish astronomer and mathematician who was the first to find evidence of the movement of sunspot emergence from the poles toward the equator over the sun's 11-year cycle.



**Agnes Baxter**  
1870 - 1917

**Agnes Baxter** was a Canadian mathematician who became only the second Canadian woman to be awarded Ph.D. in Mathematics and the fourth in North America.



**Emmy Noether**  
1882 - 1935

**Emmy Noether** is best known for her contributions to abstract algebra, in particular, her study of chain conditions on ideals of rings.



**Euphemia Lofton Haynes**  
1890 - 1980

**Euphemia Lofton Haynes** was an American mathematician and educator. She was the first African-American woman to earn a PhD in mathematics.



**Hilda Geiringer**  
1893 - 1973

**Hilda Geiringer** was an Austrian-born mathematician who worked in Statistics and Mechanics. She was married to Richard von Mises.



**Pelageia Polubarinova Kochina**  
1899 - 1999

**Pelageia Kochina** was a Russian applied mathematician, known for her work on fluid mechanics and hydrodynamics.



**Mary Cartwright**  
1900 - 1998

**Mary Cartwright** was the first woman mathematician to be elected to the Royal Society. She became Mistress of Girton College, Cambridge.



**Nina Bari**  
1901 - 1961

**Nina Karlovna Bari** was a Russian mathematician known for her work on trigonometric series.



**Marie-Louise Dubreil-Jacotin**  
1905 - 1972

**Marie-Louise Dubreil-Jacotin** was a French mathematician who worked in fluid mechanics and abstract algebra. She was the second woman in France to obtain a doctorate in pure mathematics.



**Emma Lehmer**  
1906 - 2007

**Emma Markovna Lehmer** was a Russian-born mathematician known for her work on reciprocity laws in algebraic number theory.



**Olga Taussky-Todd**  
1906 - 1995

**Olga Taussky-Todd** was an Austrian born mathematician who worked on algebraic number theory and matrix theory.

