

Mary Jackson



Achievements in the field of mathematics:

Mary Jackson, an American mathematician and space engineer working for NASA. She spent most of her career at the Langley Research Center in Hampton. First she did calculations in the western part, in the part for color. She took an engineering course and in 1958 became the first black engineer to work for NASA.

Name and surname of female mathematician:

Mary Jackson

Articles and books:

Effects of Nose Angle a Mach Number on Transition on Cones at Supersonic Speeds
Effects of Cone Angle, Mach Number, and Nose Blunting on Transition at Supersonic Speeds

Place of birth:

Hampton, Virginia

Awards and recognitions:

Congressional Gold Medal
Apollo Group Achievement Award
National Technical Association's Tribute Award

Date of birth:

09. 04. 1921

What were her obstacles?

Racial prejudice

Date of death:

11. 02. 2005

Famous male contemporaries:

Kazimierz Czarnecki

Interests beyond mathematics:

Mary enjoyed working with children and young people. She was a Girl Scout leader for over 30 years and helped a community science club build their own wind tunnel.

Famous female contemporaries:

Katherine Johnson
Dorothy Vaughan

Why did you choose her?

I chose her because she erased prejudice against black people and she was very strong and she didn't give up.

Your name, school, country:

Júlia, Business Academy Stará Lubovňa, Slovakia

KATHERINE JOHNSON



Name and surname of female mathematician:

Katherine Johnson

Place of birth:

White Sulphur Springs West Virginia, U. S.

Date of birth: August 26, 1918

Date of death: February 24, 2020

Famous male contemporaries:

- John Glenn
- Alan Shepard

Famous female contemporaries:

- Dorothy Vaughan
- Mary Jackson

Achievements in the field of mathematics:

Katherine Johnson was an American mathematician whose calculations of orbital mechanics as a NASA employee were critical to the success of the first and subsequent U.S. crewed spaceflights. During her 35-year career at NASA and its predecessor, she earned a reputation for mastering complex manual calculations and helped pioneer the use of computers to perform the tasks. The space agency noted her "historical role as one of the first African-American women to work as a NASA scientist".

Articles and books:

Reaching for the Moon: The Autobiography of NASA Mathematician Katherine Johnson

Awards and recognitions:

Presidential Medal of Freedom (2015)
Silver Snoopy award (2016)
NASA Group Achievement Award (2016)
Congressional Gold Medal (2019)

What were her obstacles?

Racial prejudice

Interests beyond mathematics:

As a young girl, Katherine loved to count. She counted everything. It would count the number of steps she took to travel. Katherine loved to learn. She liked learning math the most.

Why did you choose her?

I admire Katrina for doing great things in mathematics in a time without modern technology.

Your name, school, country

Vanesa, Business Academy Stará Ľubovňa, Slovakia

Sofya Kovalevskay



Achievements in the field of mathematics:
was a Russian mathematician, and the first woman to earn a modern doctorate in mathematics. She was also the first woman to hold full professorship in Northern Europe, and is among the first women to be an editor of a scientific journal.

Name and surname of female mathematician:
Sofia Kovalevskaya

Articles and books:
A Russian Childhood
Nihilist girl
Cauchy–Kowalevski theorem
Kovalevskaya too

Place of birth:
Moscow, Russian Empire

Awards and recognitions
full professorship in northern Europe
the first woman to obtain a doctorate (in the modern sense) in mathematics,

Date of birth:
15 January 1850

What were her obstacles?
To venture, as she did, into academia, a world almost no woman had yet explored
Society looked on, half-expecting her to fail

Date of death:
10 February 1891

Famous male contemporaries:

none

Interests beyond mathematics:

She was editor of a scientific journal

Famous female contemporaries:

none

Why did you choose her?
Because even than society didn't trust her, she went on

Your name, school, country
Matej, Business Academy, Slovakia

Cecilia Krieger



Cecilia Krieger

Place of birth:

Jasło, Galicia [Poland]

Date of birth:

9 April 1894 in

Date of death:

17 August 1974

Famous male contemporaries:

none

Famous female contemporaries:

Evelyn Nelson

Your name, school, country

sk.njka, Business academy in Stará Ľubovňa, Slovakia

Krieger was the third person (and first woman) to earn a Ph.D. in mathematics from a university in Canada, in 1930,^[1] as well as the third woman to have been awarded a doctorate in any discipline in Canada.

There is the Krieger–Nelson Prize which presented by the Canadian Mathematical Society in recognition of an outstanding woman in mathematics. The award is named after Cecilia Krieger and Evelyn Nelson.

Articles and books:

In 1934, Krieger published an English translation of Sierpiński's book *Introduction to General Topology*. She also translated *General Topology* by Sierpiński in 1952, adding a 30-page appendix on infinite cardinals and ordinals.^[2]

Awards and recognitions:

- an award named after Krieger (and Nelson)
- the third person (and first woman) to earn a Ph.D. in mathematics from a university in Canada
- the third woman to have been awarded a doctorate in any discipline in Canada

Obstacles:

The persecution of Jews made life extremely difficult for the Krieger family, and Cecilia's brother Samuel sponsored his mother and sisters to escape to Canada. This they did in 1920 and arrived in Toronto where Cecilia entered the University. This was certainly no easy task since at the time that she arrived she did not know hardly a single word of English. An added complication was the fact that she had to support herself financially and this she did by working in the Muskoka Inn while she studied at University.

Interests beyond mathematics:

Why did you choose her?

I choose her because she was the first woman who earn Ph.D. in mathematics from a university in Canada. It must have been a really big success for her and for other women.

Florence Nightingale



Name and surname of female mathematician:
Florence Nightingale

Place of birth:
Florenca, Italy

Date of birth:
May 12, 1820

Date of death:
† August 13, 1910

Famous male contemporaries:
» **George Boole**
» **Niels Henrik Abel**

Famous female contemporaries:
» **Sofia Kovalevskaya**
» **Emmy Noether**

Achievements in the field of mathematics:

One of her most important contributions to medicine was the use of statistics to evaluate treatments.

She created numerous infographics, and was one of the first to use pie charts.

She founded the first school for nurses in the world.

Articles and books:

**Notes on Nursing
The Crimean War
Notes on hospitals
To Her Nurses
Cassandra...**

Awards and recognitions:

**Royal Red Cross
Advice for merit**

What were her obstacles?

She suffered from chronic fatigue syndrome. She wanted to move her education in mathematics, her mother did not agree.

Interests beyond mathematics:

**She studied history, mathematics, Italian, classical literature and philosophy.
Since she was a child, she has shown an extraordinary ability to collect and analyze data.**

Why did you choose her?

She fascinated me with her education and the fact that she founded the first training school for nurses. I admire her for treating wounded British soldiers during the Crimean War.

Your name, school, country

Renáta, Business Academy Stará Ľubovňa, Slovakia

Emmy Noether



Emmy Noether

Place a birth: Erlangen

Date of birth: 23. 3. 1882

Date of death: 14. 4. 1995

Famous male contemporaries:

Famous female contemporaries:

Was a German **mathematician** who made significant contributions in the field of **abstract algebra** and **theoretical physics**.

She made revolutionary discoveries in the theory of circuits, fields and algebras. Albert Einstein called her the most important woman in the history of mathematics.

Noether's theorem is a key finding of **theoretical physics**, expressing the relationship between **symmetry** and **conservation laws**

Awards and recognitions

gender discrimination

Interests beyond mathematics:
arithmetic, french, english

Why did you choose her?

She fascinated me with what she invented

Sk. ivka, Business Academy – Stará Ľubovňa, Slovakia

Julia Hall Bowman Robinson



Achievements in the field of mathematics:

She was an American mathematician. She is the first female mathematician elected to the US National Academy of Sciences, and was the first female president of the American Mathematical Society.

Name and surname of female mathematician:

Julia Robinson

Articles and books:

The collected works of Julia Robinson
Julia: A life in Mathematics

Place of birth:

St. Louis, Missouri, United States

Awards and recognitions

She was elected the 1. President of the American Mathematical Society.
Noether Lecturer (1982)
MacArthur Fellow

Date of birth:

December 8, 1919

What were her obstacles?

Fortunately, she had no obstacles

Date of death:

July 30, 1985 (aged 65)

Famous male contemporaries:

David Blackwell

Interests beyond mathematics:

Science

Famous female contemporaries:

Katherina Johnson

Why did you choose her?

Because in my opinion she was great mathematician.

Your name, school, country

skSaška, Business Academy – Stará Ľubovňa, Slovakia

Dorothy Vaughan



Achievements in the field of mathematics:

Vaughan served as head of the West Computers until 1958, when NACA was incorporated into the newly created NASA, which closed the segregated facilities. Vaughan and many other West Computers then joined the NASA Analysis and Computation Division, a group made up of men and women of all races. By then, the space program had begun using electronic computers, and Vaughan became an expert at FORTRAN, a computer programming language used for scientific and algebraic applications. She retired from NASA in 1971.

Name and surname of female mathematician:
Dorothy Johnson Vaughan

Articles and books:

Margot Lee Shetterly—Hidden Figures

Place of birth:
Kansas City, Missouri

Awards and recognitions

In 2019, Vaughan was awarded the Congressional Gold Medal posthumously

Date of birth:
September 20, 1910

What were her obstacles?

Her obstacle was that she was black. At that time, they condemned black people.

Date of death:
November 10, 2008

Famous male contemporaries:
I didn't find anyone.

Interests beyond mathematics:

Her interests were to expand scientific knowledge of mathematics.

Famous female contemporaries:
Katherine Johnson and Mary Jackson

Why did you choose her?

I was fascinated that she went for her own goal, despite the way people were with her.

Your name, school, country
sk.viktoria / Business Academy Stará Ľubovňa / Slovakia

Dorothy Maud Wrinch



Name and surname of female mathematicians:

Dorothy Maud Wrinch

Place of birth:

Rosario in Argentina

Date of birth:

September 12, 1894

Date of death:

February 11, 1976 (age 81)

Famous male contemporaries:

John Horton Conway

Famous female contemporaries:

Katherine Johnson

Achievements in the field of mathematics:

She was a mathematician and biochemical theorist best known for her attempt to derive protein structure using mathematical principles. She was an advocate of the controversial "cyclol" hypothesis about the structure of proteins. She is recognized for her contribution and inspiration in the field of molecular biology. In 1929, she became the first woman to receive the Oxford DSc degree.

Articles and books:

Fourier transforms and structure factors
Chemical Aspects of Polypeptide Chain Structures and the Cyclol Theory

Awards and recognitions

She was the first woman to earn a doctorate in science (the science department included mathematics)

What were her obstacles?

Her obstacles were first married and then for a short time a child who had to take care of herself.

Interests beyond mathematics:

Her interests were to expand scientific knowledge of physics, chemistry, biology and mathematics.

Why did you choose her?

I was fascinated by the fact that she was the first woman who was to earn a doctorate in science.

Your name, school, country

sk.helenka / Business Academy Stará Ľubovňa / Slovakia

Wang Zhenyi



Name: **Wang Zhenyi**

Place of birth:
Shanghai.

Wang was born in
November **1924**

Wang was death in **1797**

Was a Chinese scientist and mathematician living during the Qing Dynasty. Despite the laws and customs that prevent women from earning a university degree, she studied subjects such as astronomy, mathematics, geography and medicine.

In her books and articles, Wang wrote about trigonometry and Pythagoras' theorem, studied solar and lunar eclipses, and explained many other celestial phenomena.

She was a prolific writer with at least 12 books to her name. Most of her works are expositions and explanations of mathematical theorems such as the Pythagorean Theorem and trigonometry, though she also published a collection of original poetry and original articles on her astronomy research. This included works explaining the movements of equinoxes as well as a paper analyzing the movement of the Moon and describing solar and lunar eclipses. She also made the case for the adoption of the Western, solar calendar in Qing China, to replace the ancient lunar calendar.

Why did you choose her?
She fascinated me with her look.

Your name, school, country
Bianka, Business Academy, Slovakia.

Wang Zhenyi



She was a Chinese scientist and mathematician living during the Qing dynasty. Despite laws and customs preventing women from receiving higher education, she studied subjects like astronomy, mathematics, geography and medicine.

In her books and articles, Wang wrote about trigonometry and Pythagoras' theorem, studied solar and lunar eclipses, and explained many other celestial phenomena.

Name and surname of female mathematician:
Wang

Articles and books:
She rewrite *Principles of Calculation*
She write *The Simple Principles of Calculation*
Studied solar , Lunar eclipses

Place of birth:
Anhui

Awards and recognitions
International Astronomical Union recognized

Date of birth:
1768

What were her obstacles?
That she studied really difficult . She has bad marks but she never give up.

Date of death:
1782

Famous male contemporaries:
her father, astronomy from her grandfather

Interests beyond mathematics:

Famous female contemporaries:
poetry from her grandmother

Why did you choose her?
She interested me . She look really nice and she look like strong and clever woman.

Your name, school, country
Marianka , Obchodná academia, Slovakia



TURKEY

Maria Getana AGNESI



Maria Gaetana Agnesi, (born May 16, 1718, Milan, Habsburg crown land [now in Italy]—died January 9, 1799, Milan), Italian mathematician and philosopher, considered to be the first woman in the Western world to have achieved a reputation in mathematics.

Maria Gaenata AGNESI

Articles and books:

Instituziona analitiche adli della gioventu italiana
She wrote a volume book.

Place of birth
Milan, Italy

Date of birth:
May 16 1718

Date of death:
January 9, 1799

Famous male contemporaries:
Öklid
Leonhard Euler

Famous female contemporaries:
Ada Lovelace

What were her obstacles?

Being a woman living in ancient times could sometimes be an obstacle

Why did you choose her ?

For being the first woman professor.

Your name, school, country

Gül AYYILDIZ Kırıkkale HightSchool TURKEY

Valentina Borok



Achievements in the field of mathematics:
Her graduate thesis on distribution theory and the applications to the theory of systems of linear partial differential equations was considered extraordinary. The results of her studies included the construction of maximum classes of singularity and well-positioned theorems of the type Phragmen-Lindelöf and the property study asymptotic and problem-solving stability of infinite layer contour value.

Name and surname of female mathematician:
Valentina Borok

Articles and books:
During her lifetime, Valentina published about 80 articles in major Russian and Ukrainian magazines. Guided 16 doctors and many more theses of master's theses, she also wrote books like "Eight Papers on Functional Analysis" and "Partial Differential Equations".

Place of birth:
Kharkiv, Ukraine

Awards and recognitions
She received a postgraduate degree in University of Moscow, received a PhD for her studies and discoveries and she was considered the teacher of rigorous analysis in Kharkiv University.

Date of birth:
9-07-2004

What were her obstacles?
Valentina Borok had a privileged childhood as she always had access to education, however she went through difficult years of evacuation during World War II for being Jewish. Later in 1994 she urgently had to retire and emigrate to Israel due to a serious illness as she didn't have the necessary medical treatment in Ukraine. Her misfortune was the need to abandon her job in mathematics because of this grave illness.

Date of death:
4-02-2004

<p>Famous male contemporaries: Serge Lang; Heinz Bauer; Thomas Benjamin; Walter Feit</p>	<p>Interests beyond mathematics: Her life was devoted to mathematics, but during the last ten years of her life, Valentina dedicated her time to build very close relationship to their children and helped raised her five grandchildren and managed to leave her legacy.</p>
<p>Famous female contemporaries: Ann Fennema; Vivienne Malone-Mayes; Eléna Kreindler; Mary Warner</p>	<p>Why did you choose her? I chose this mathematician because I became curious about her findings and her accomplishments.</p>
<p>Your name, school, country Tiago Pessoa Gomes Secondary School of Pombal, Portugal</p>	

Ada Lovelace (Augusta Ada Byron)



Name and surname of female mathematician:
Ada Lovelace
(Augusta Ada Byron)

Place of birth:
English

Date of birth:1815

Date of death:1852

Famous male contemporaries: James Joseph Sylvester
Boole, Riemann

Famous female contemporaries: Nightingale, Carrol

Achievements in the field of mathematics:

Together with Charles Babbage, she worked on the Analytical Engine an early, mechanical computer. She also wrote the first algorithm

Articles and books:

Awards and recognitions: The first computer programmer in history.

What were her obstacles?

Interests beyond mathematics: Algoritm

Why did you choose her? She is the first computer programmer in history.

Your name, school, country:
Melisa N./Hatay Anatolian High School/Turkey

Annie Easley



Achievements in the field of mathematics:

Easley wrote the software for the Centaur rocket stage, and her work paved the way for later rocket and satellite launches.

Name and surname of female mathematician:
Annie Easley

Articles and books:

Place of birth: America

Awards and recognitions :She was one of the first African-Americans to work at NASA as a “computer”.

Date of birth: 1933

What were her obstacles?

Date of death: 2011

Famous male contemporaries:
Langlands, Conway,
Matiyasevich

Interests beyond mathematics:

She analysed battery life, energy conversion, and alternative power technologies like solar and wind.

Famous female contemporaries:
Uhlenbeck,

Why did you choose her?

Having done important studies in recent history

Your name, school, country:

Feyza T./Hatay Anatolian High School/Turkey

Marie-Sophie Germain



Name and surname of female mathematician:
Marie-Sophie Germain

Place of birth:
France

Date of birth:
1776

Date of death:
1831

Famous male contemporaries:
Legendre, Gauss

Famous female contemporaries: Mary Somerville, Wang Zhenyi

Achievements in the field of mathematics:

She also made considerable progress in solving Fermat's Last Theorem
She was a pioneer in understanding the mathematics of elastic surfaces

Articles and books:

Awards and recognitions

Germain was a pioneer in understanding the mathematics of elastic surfaces, for which she won the grand prize from the Paris Academy of Sciences.

What were her obstacles?

Her parents tried to prevent her from studying when she was young, and she never received a post at a university.

Interests beyond mathematics: She made considerable progress in solving Fermat's Last Theorem, and regularly corresponded with Carl Friedrich Gauss.

Why did you choose her? Her parents tried to prevent her from studying when she was young, and she never received a post at a university. This would be my attention.

Your name, school, country
Çağla A./Hatay Anatolian High School/Turkey

SOPHIE GERMAIN



Achievements in the field of mathematics:
 The help of Sophie Germain's famous Fermat's Theorem in mathematics is considered very important by scientific circles. These studies, the numbers itself, shed light on the next 100-year progress. Germain has participated in many math competitions and has written articles, but has never qualified.
 Sophie Germain makes her next work on the "Elasticity Theory", which deals with the vibration of metal plates. This work earns her the Paris Academy of Sciences award. Germain is the first woman to win this award.
 In short, it is accepted that Sophie Germain made important contributions to the development of theories on the motion of elastic and rigid bodies and to the solution of the most famous mathematical problem of all time known as Fermat's last theorem.

Name and surname of female mathematician:
 Sophie Germain

Articles and books:
 Sophie Germain the following book have been written about:
 1-Sophie's Diary-Math Novel

Place of birth:
 Paris

Awards and recognitions:
 - She won the Paris Academy of Sciences award. Germain is the first woman to win this award.

Date of birth:
 April 1, 1776

What were her obstacles?
 In those years, it was forbidden for a woman to attend this school and attend classes. Since she was a woman, she had to carry out her scientific studies under another name for a long time. Not only academic circles but also her family did not find it appropriate for a woman to be interested in science or politics. Sophie used to do her math studies in secret under dim light after everyone was asleep. In 1829, she learned that she had breast cancer. She continued her work, despite her suffering.

Date of death:
 June 27, 1831

<p>Famous male contemporaries:</p> <ol style="list-style-type: none"> 1) Joseph Louis Lagrange 2) Gauss 3) Cauchy 	<p>Interests beyond mathematics:</p> <p>Focusing on all of her father's math books, Sophie taught herself Latin and Greek. She read Newton and Euler.</p>
<p>Famous female contemporaries:</p> <ol style="list-style-type: none"> 1) Maria Angela Ardinghelli 	<p>Why did you choose her?</p> <p>The reason I chose Sophie Germain is because she just read a mathematician's life and devoted herself to mathematics. Even though he faced many obstacles, he overcame them all thanks to his determination, persistence, determination and stubbornness.</p>
<p>Fatmagül Unye Mehmet Refik Güven Science High School TURKEY</p>	

SOPHIE GERMAIN (1776 – 1831)



Famous mathematician Lagrange discovered his intelligence in mathematics for the first time. A homework he prepared for Lagrange, out of concern that the woman would not be given importance 'M. LeBlanc' under a fake name. Lagrange later learns that this genius is Sophie Germain. One of Sophie's biggest supporters in the field of mathematics becomes Lagrange.

His father is a wealthy silk merchant. He was born in 1776 as the daughter of a family in which liberal reforms were discussed and planned in the society. After reading the death story of Archimedes at 13, he decided to be after mathematics.

He learns himself Latin and Greek. Despite his family's opposition, the mother and her children read Newton and Euler after they sleep. Philosophy engulfs curiosity. He decides to support Sophie throughout her life with the boy who cannot cope with such a stubborn child.

Caroline Herschel

*Student's artwork or the picture
from the Internet
(portrait of the chosen female
mathematician)*



Achievements in the field of mathematics:

When Caroline settled in England, her brother William taught her music. Then when I saw Caroline's interest in the stars; He also taught him astronomy, algebra, and trigonometry. Caroline learned very well spherical trigonometry, which she saw useful for astronomy. The two brothers gave up their musical studies in 1782 and turned entirely to astronomy. Caroline increased her knowledge of astronomy while cataloging her brother's discoveries with the telescope. After a while, the two brothers started making their own telescopes together.

When Caroline began discovering new comets in 1787 and wrote a scientific article on the subject, King III. George was paid by him. This kind of practice had never been done in England until then. Caroline made her third and fourth comet discoveries in 1790. A year later, he used the new telescope his brother made, and the number of comets he discovered reached five. Caroline discovered eight comets by 1797, and did not use a telescope when exploring her final comet.

One year later, Caroline, who published her renewed star catalog, which added 560 fixed stars that were not included in previous catalogs, took a 25-year break from astronomy. At that time, he was interested in the education of his brother's son. Caroline, who is highly respected in England, was often hosted at the king's palace. When his brother William died in 1822, Caroline returned to Germany, settled in Hanover, and again became interested in astronomy. When the catalog in which he recorded the 2500 nebulae he had observed was published in 1828, the Royal Astronomical Society awarded him a gold medal.

	<p>Caroline, who was respected by the European scientific community while in Germany, was frequently visited by well-known scientists, especially the mathematician Gauss.</p>
<p>Name and surname of female mathematician:</p> <p>Caroline Herschel</p> <hr/>	<p>Articles and books:</p> <p>In 1797, William's observations showed that there were too many inconsistencies in John Flamsteed's star catalog. This catalog was difficult to use: it was printed in two volumes, the volume suitable for the catalog and the volume of original observations, making it very difficult to use. William needed a good cross-index comparison study to properly see the differences, but he was not willing to spend his time on them at the expense of his more interesting astronomical activities. So he suggested that Caroline take on this task. The resulting "Star Catalog" was published by the Royal Society in 1798 and includes an index of every observation made by Flamsteed, a typo list, and a list of more than 560 previously not included stars.</p>
<p>Place of birth:</p> <p>Hanover, Holy Roman Empire</p>	<p>Awards and recognitions</p> <p>Herschel was awarded a gold medal from the London Astronomical Society and the then King of Prussia. The Astronomical Society's gold coin was given in 1828 for the last work of his famous brother, which reduced the number of nebulae, which he initially determined as 2500, to 1800 in January. This can be taken as the end of a series of laborious studies that are not parallel in importance or magnitude in the astronomical business annals. Herschel completed these studies after his brother's death and his departure to Hanover.</p> <p>The Royal Astronomical Society acknowledged Herschel as honorary members in 1835, with Mary Somerville: Mary and Caroline were the first female members. In 1838, he was informed by the Royal Astronomer Sir William Hamilton of his election as an</p>

	<p>honorary member of the Royal Irish Academy in Dublin.</p> <p>In 1846, at the age of 96, he was awarded the Gold Medal of Science by the King of Prussia at the time. The transmitter, Alexander von Humboldt, was obliged to award the award to Herschel "for the discoveries, observations and difficult processes he made, as a colleague of his immortal brother Sir William Herschel, in light of his valuable services to astronomy".</p> <p>The comet 281 Lucretia, discovered in 1888, is named after Herschel's middle name. The C. Herschel crater on the moon is also named after him.</p>
<p>Date of birth: 16 MARCH 1750</p>	<p>What were her obstacles?</p>
<p>Date of death: 9 JANUARY 1848</p>	<p>Caroline, who caught typhus when he was ten years old, stopped growing and was very short and blind in one eye.</p>
<p>Famous male contemporaries:</p> <p>Bernoulli</p>	<p>Interests beyond mathematics:</p> <p>astronomy, music and art</p>
<p>Famous female contemporaries:</p> <p>Maria Gaetana Agnesi</p>	<p>Why did you choose her?</p> <p>My purpose in choosing this mathematician is as follows: being disabled at an early age, growing up in difficult life conditions and being interested in astronomy.</p>
<p>Your name, school, country MEHMET URAM ,DERBENT HIGH SCHOOL ,TURKEY</p>	

HYPATIA



Achievements in the field of mathematics:

Hypatia was a prominent astronomer and mathematician in ancient Alexandria. She was also the first female mathematician whose life and work are reasonably well recorded. She edited or wrote commentaries on many of the scientific books of her time, and constructed astrolabes and hydrometers.

Name and surname of female mathematician:

Hypatia

Articles and books:

- Her book "The Astronomical Canon" (Laws of Astronomy).
- A 13-volume commentary on arithmetic.
- Commentary on Apollonius's Conics.
- Editing on Ptolemy's "Almagest".
- Arrangement on "Elements of Euclid" written by his father Theon.

Place of birth: Egypt

Awards and recognitions:

Date of birth:

c. 360

What were her obstacles?

Gender discrimination

Date of death:

415 CE

Famous male contemporaries:

DAVID HILBERT
LEONARDO FIBONACCI

Interests beyond mathematics:

Although she teaches astronomy, I don't think she has anything to do with anything beyond mathematics.

Famous female contemporaries:

SOFIA KOVALEVSKAYA
CAROLINE HERSCHEL

Why did you choose her?

Because I was impressed by her actions and the story of her death

Your name, school, country

Beren E./Kırıkkale High School/Turkey

KATHERINE JOHNSON



Achievements in the field of mathematics:

Creola Katherine Johnson was an American mathematician whose calculations of orbital mechanics as a NASA employee were critical to the success of the first and subsequent U.S. crewed spaceflights. During her 35-year career at NASA and its predecessor, she earned a reputation for mastering complex manual calculations and helped pioneer the use of computers to perform the tasks. The space agency noted her "historical role as one of the first African-American women to work as a NASA scientist". Johnson's work included calculating trajectories, launch windows, and emergency return paths for Project Mercury spaceflights, including those for astronauts Alan Shepard, the first American in space, and John Glenn, the first American in orbit, and rendezvous paths for the Apollo Lunar Module and command module on flights to the Moon. Her calculations were also essential to the beginning of the Space Shuttle program, and she worked on plans for a mission to Mars.

Name and surname of female mathematician:

CLEORA KATHERINE JOHNSON

Articles and books:

-**Reaching for the Moon: The Autobiography of NASA Mathematician**

-Cobwebs Magazine

-A Nurse's Tale

Place of birth:

White Sulphur Springs, West Virginia, USA

Awards and recognitions

-2015, NCWIT Pioneer in Tech Award

-1971, 1980, 1984, 1985, 1986: NASA Langley Research Center Special Achievement award

Date of birth:

August 26, 1918

What were her obstacles?

-The main **challenges faced** by **Katherine Johnson** were segregation and discrimination

Date of death:

February 24, 2020

Famous male contemporaries:

Paul Erdős
John Forbes Nash
Ernest Wilkins

Interests beyond mathematics:

-She learned French

Famous female contemporaries:

Julia Robinson

Why did you choose her?

I chose her because I am so interested in space and NASA and she has worked for NASA for years.

Your name, school, country

Kerem Bora, Suleyman Demirel High School, Turkey

SOFIA KOVALEVSKAYA

Student's artwork or the picture from the Internet (portrait of the chosen female mathematician)



Achievements in the field of mathematics:

She is the first great female Russian mathematician. He made many original contributions to the fields of analysis, differential equations and mechanics. She is the first woman to receive full professorship in Northern Europe. She was also one of the first women to work as an editor for a scientific journal. Kovalevskaya's name has many alternatives. He used the name Sophie Kowalevski (or usually Kowalevsky) for academic editions. He used his first name as "Sonya" after moving to Sweden.

Name and surname of female mathematician:

Sofia Kovalevskaya

Articles and books:

Kovalevsky top

Place of birth:

MOSCOW

Awards and recognitions

Did not receive an award

Date of birth:

15 JANUARY 1850

What were her obstacles?

Despite her natural talent for mathematics, Sofia could not complete her education in Russia. Because at that time, women were not accepted to university. Written permission from her father or husband was required to study abroad. For this reason, Sofia had a fake marriage with Vladimir Kovalevsky, a young paleontology student who would later become famous for working with Charles Darwin. The two emigrated from Russia in 1867.

Date of death:

10 FEBRUARY 1891

<p>Famous male contemporaries:</p> <p>Marius Sophus Lie</p>	<p>Interests beyond mathematics:</p> <p>Analysis, differential equations and mechanics</p>
<p>Famous female contemporaries:</p> <p>Amalie Emmy Noether</p>	<p>Why did you choose her?</p> <p>Being a female mathematician, choosing this in difficult conditions in those years, having a bad family situation</p>
<p>Your name, school, country</p> <p>ABİDİN MORBEL, DERBENT HIGH SCHOOL , TURKEY</p>	

Sofia Kovalevskaya



Achievements in the field of mathematics:

the first woman to earn a modern doctorate in mathematics. She was also the first woman to hold full professorship in Northern Europe, and is among the first women to be an editor of a scientific journal.

Name and surname of female mathematician:
Sofia Kovalevskaya

Articles and books: She wrote several works about her life including a memoir, a play and an autobiographical novel.

Place of birth:
Russia

Awards and recognitions: The first woman to earn a modern doctorate in mathematics. She was also the first woman to hold full professorship in Northern Europe, and is among the first women to be an editor of a scientific journal.

Date of birth:
1850

What were her obstacles?

Date of death:
1891

Famous male contemporaries:

Interests beyond mathematics: Kovalevskaya made major contributions to analysis, partial differential equations, and mechanics.

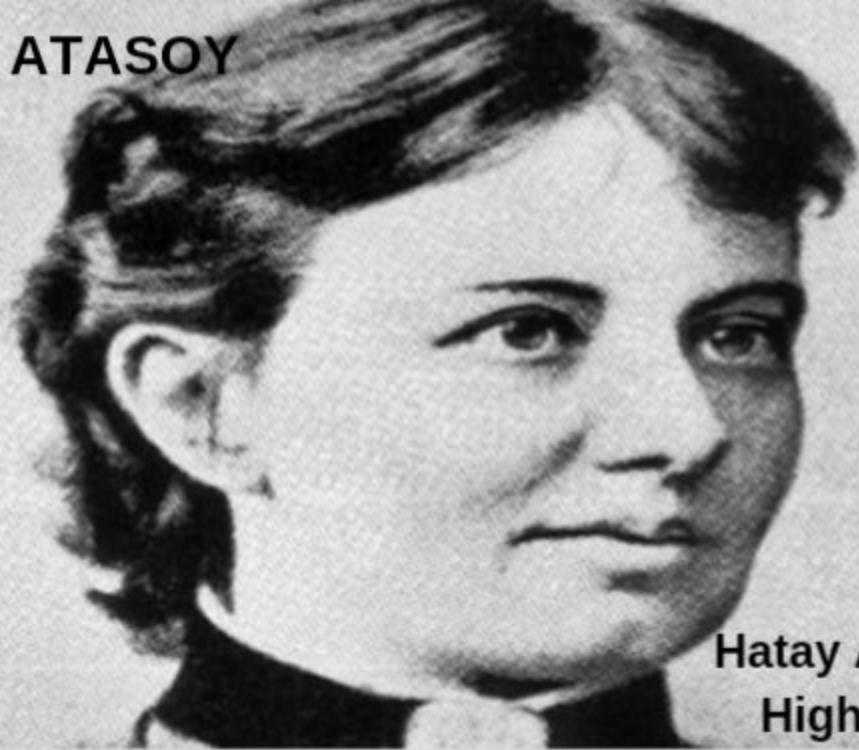
Lie, Hilbert, Cantor

Famous female contemporaries: Florence Nightingale

Why did you choose her?
Having achieved firsts, to do successful work

Your name, school, country:
Hüseyin A./Hatay Anatolian High School/Turkey

Hüseyin ATASOY



Hatay Anatolian
High School

Sofia Kovalevskaya

(1850 – 1891)

Kovalevskaya made significant contributions to the theory of differential equations and became the first woman to receive a doctorate in mathematics. This woman who was in love with mathematics had to marry at the age of 18 in order to get higher education after completing her basic education with private lessons. Because in Russia at the time, it was considered forbidden for a woman to live separately without the permission of her father or husband. When he went to study mathematics in Heidelberg in 1869; He had to face the fact that women couldn't study college. Nevertheless, he persuaded the university officials to attend classes illegally. In 1871 he moved to Berlin to work with the mathematician Karl Weierstrass; but again he was not allowed to attend university classes. In the autumn of 1874, Kovalevskaya completed 3 works; each was evaluated as a doctoral subject by Weierstrass. The work was about partial differential equations, the integral and the ring of Saturn. In 1874, Kovalevskaya received her doctorate from the University of Göttingen, but this again did not give her an academic position. Despite the endless obstacles brought by her gender and political identity, Sofia, the first woman to lecture at a university in Europe, died at the age of 41 as a result of the progress of her illness that started with a cold she was caught.

Marie-Sophie Germain



Name and surname of female mathematician:

Marie-Sophie Germain

Place of birth:

Rue Saint-Denis, Paris, France

Date of birth:

April 1, 1776

Date of death:

June 27, 1831

Famous male contemporaries:

**Joseph Fourier
Carl Friedrich Gauss

Famous female contemporaries:

**Wang Zhenyi*

Achievements in the field of mathematics:

Germain was a pioneer in understanding the mathematics of elastic surfaces, for which she won the grand prize from the Paris Academy of Sciences. She also made considerable progress in solving Fermat's Last Theorem, and regularly corresponded with Carl Friedrich Gauss.

Articles and books:

**Recherches sur la théorie des surfaces élastiques
*Revolutionary Mathematician
Las pirañas

Awards and recognitions

Germain tried again and received an honorable mention for her next entry, but it had too many errors to succeed. She tried a third time and, on January 8, 1816, she was awarded the enormously prestigious Paris Academy of Sciences Prize, a one kilogram gold medal. Germain, now 39, was the first woman to win one.

What were her obstacles?

Unfortunately, as a woman, she was faced with significant opposition. Her parents tried to prevent her from studying when she was young, and she never received a post at a university.

Interests beyond mathematics:

Since her interest in mathematics emerged from an early age, I think she has no interest beyond math.

Why did you choose her?

Because her life is very inspiring and a great source of motivation for us.

Your name, school, country

Efe Çakıltepe/Kırıkkale High School/Turkey

Meryem Mirzahani

Student's artwork or the picture from the Internet (portrait of the chosen female mathematician)



Achievements in the field of mathematics:

Mirzahani particularly focuses on hyperbolic geometry, ergodic theory, symplectic geometry, and Teichmüller theory.

Mirzahani particularly focuses on hyperbolic geometry, ergodic theory, symplectic geometry, and Teichmüller theory.

With the motivation of the mathematics teacher of the "gifted school" he went to after primary school, he tried to sleep with geometry, calculate the areas of different surfaces, and prove the theories.

In 1994, he reached the school principal's door with his friend Roya and said, "We want to participate in the International Mathematics Olympics (UMO)." In an interview by Meryem, the school principal, which she told "She was a very solid person", hesitated at first, but finally applied to UMO for two students, saying "Why not? Meryem got full points from 5 out of 6 tests in the Olympics she participated in 1994 and deserved the gold medal with 41 points. That year, his friend Roya received the silver medal with 35 points. After this success, Meryem became more involved in mathematics and collected 42 points by completing all the tests in 1995 UMO without errors and again took the gold medal to Iran.

Name and surname of female mathematician:

Meryem Mirzahani

Articles and books:

Mirzakhani, who can easily use extremely powerful techniques of various topics such as algebraic geometry, analysis, topology and even probability, has obtained basic results on Riemann surfaces and their moduli spaces and opened new research areas for mathematicians working in this field. Leaving us at

	<p>a young age is a great loss that cannot be filled in for the mathematics community.</p>
<p>Place of birth: TAHRAN</p>	<p>Awards and recognitions</p> <ul style="list-style-type: none"> • 2014 International Mathematicians Congress Fields Medal • 2014 Clay Research Award <p>2013 American Mathematical Society Satter Award</p> <ul style="list-style-type: none"> • 2009 Blumenthal Award <p>1995 Mathematics Olympics Gold Medal Award 1994 Mathematics Olympics Gold Medal Award</p> <ul style="list-style-type: none"> • Meryem, 37 at that time, was awarded the "Fields Medal" of the International Mathematicians Association, which meets every four years.
<p>Date of birth: 3 MAY 1977</p>	<p>What were her obstacles?</p> <p>She died of breast cancer on July 15, 2017</p>
<p>Date of death: 15 JULY 2017</p>	
<p>Famous male contemporaries: Perelman</p>	<p>Interests beyond mathematics:</p> <p>Mirzakhani, who can easily use extremely powerful techniques of various topics such as algebraic geometry, analysis, topology and even probability, has obtained basic results on Riemann surfaces and their moduli spaces and opened new research areas for mathematicians working in this field. Leaving us at a young age is a great loss that cannot be filled in for the mathematics community.</p>
<p>Famous female contemporaries: Annie Easley</p>	<p>Why did you choose her?</p> <p>Speaking about his childhood in previous interviews, Mirzakhani said that his first dream was writing. The award-winning mathematician described this passion in an interview with the Guardian:</p> <p>"I enjoyed reading novels. I was actually reading</p>

	<p>whatever I could find. I never thought I'd be interested in mathematics until I finished high school."</p> <p>Mirzahani, who has three siblings, was interested in mathematics when his brother asked him to add numbers from 1 to 100. His brother read to Mirzahani how this problem was solved from the magazine named Gauss. And the solution in the magazine fascinated Mirzahani. The award-winning mathematician sums up that moment as follows: "For the first time, I was happy with a solution to a problem, although I couldn't solve it myself."</p> <p>Meryem, the 54th scientist who received the award given to mathematicians under the age of 40, was the first woman to receive this award, unlike the previous 53.</p>
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Your name, school, country

MUSTAFA BALCI,DERBENT HIGH SCHOOL ,TURKEY

Cathleen Synge Morawetz



Cathleen Synge Morawetz

In 1998 she was awarded the National Medal of Science; she was the first woman to receive the medal for work in mathematics. In 2004 she received the Leroy P. Steele Prize for Lifetime Achievement. In 2006 she won the George David Birkhoff Prize in Applied Mathematics.

Morawetz's research was mainly the investigation of partial differential equations that regulate fluid flow, specifically mixed types that occur in transonic flow.

"On the non-existence of continuous transonic flows past profiles I".

"Note on a Maximum Principle and a Uniqueness Theorem for an Elliptic-Hyperbolic Equation".

"Time Decay for the Nonlinear Klein-Gordon Equation"

"On the Modes of Decay for the Wave Equation in the Exterior of a Reflecting Body".

"The Calculations of an Inverse Potential Problem"

Cathleen Synge Morawetz is Canadian.

In 1981, she became the first woman to deliver the Gibbs Lecture of The American Mathematical Society.

She was named Outstanding Woman Scientist for 1993 by the Association for Women in Science.

In 1995, she became the second woman elected to the office of president of the American Mathematical Society .

In 1996, she was awarded an honorary ScD degree by Trinity College Dublin, where her father JL Synge had been a student and later a faculty member.

In 1998 she was awarded the National Medal of Science; she was the first woman to receive the medal for work in mathematics.

And many more achievements.

Cathleen Synge Morawetz was born on May 5, 1923.

What were her obstacles?

She had no disability .

Date of death:

<p>Famous male contemporaries: Some examples of this ; Albert Einstein , Isaac Newton , Stephen Hawking and such .</p>	<p>Interests beyond mathematics: Morawetz lived in Greenwich Village with her husband, Herbert Morawetz, a polymer chemist. They had four children, eight grandchildren and one great grandchild. His children are Pegeen Rubinstein, John, Lida Jeck, and Nancy Morawetz (a professor who runs the Immigration Rights Clinic at New York University Law School).</p>
<p>Famous female contemporaries: Some examples of this; Hypatia , Sophie Germain , Ada Lovelace and such .</p>	<p>Why did you choose her? Because I think she is so clever and successful so I choose her .</p>
<p>Çağla Pişkin Ünye Mehmet Refik Güven Science High School From Ordu / Ünye</p>	

Florence Nightingale



- > One of her most important contributions to medicine was the use of statistics to evaluate use of statistics to evaluate treatments.
- > She created numerous infographics, and was one of the first to use pie charts.
- > She founded the first school for nurses in the world.
- > British mathematician, statistician and nurse.

Florence Nightingale

- > What is it and What it is not.
- > Considerations on the nature of nursing.

ITALY

- > Royal Red Cross (1883)

12 May 1820

- > She suffered from chronic fatigue syndrome.
- > She wanted to move her education in

13 August 1910	mathematics, her Mother did not agree.
<ul style="list-style-type: none"> > Niels Henrik Abel > George Boole > Marius Sophus Lie 	<p>> He became interested in health issues at the age of 25. Nursing attracted his interest. He became the director of a hospital in London where women patients were taken care of. Italian, classical literature and philosophy. Since she was a child, she has shown an extraordinary ability to collect and analyze data.</p>
<ul style="list-style-type: none"> > Sofia Kovalevskaya > Ada Lovelace > Emmy Noether 	<p>> She fascinated me with her education and the fact that she founded the first training school for nurses. I admire her for treating wounded British soldiers during the Crimean War.</p>
Esmanur Çifci / Ünye Science High School / TURKEY	

Florence Nightingale



Name and surname of female mathematician:
Florence Nightingale

Place of birth:
Italy

Date of birth:
12 May 1820

Date of death:
13 August 1910

Famous male contemporaries:
*Niels Henrik Abel
*George Boole
*Marius Sophus Lie

Famous female contemporaries:
*Sofia Kovalevskaya
*Ada Lovelace
*Emmy Noether

Achievements in the field of mathematics:

- British mathematician, statistician and nurse.
- Used statistics to evaluate treatments.
- Created a large number of infographics .
- Was the first to use pie charts.

Articles and books:

- What is it and What it is not.
- Considerations on the nature of nursing.

Awards and recognitions:

- Royal Red Cross (1883)

What were her obstacles?

He wanted to shift his education to the field of mathematics before he was twenty, but this request was not welcomed by his mother. According to her mother, math wouldn't do much for a woman. Decisive Florence eventually won the war.

Interests beyond mathematics:

He became interested in health issues at the age of 25. Nursing attracted his interest. He became the director of a hospital in London where women patients were taken care of.

Why did you choose her?

Because she is really successful. It is a source of inspiration for people.

Your name, school, country

Rabia A./ Kırıkkale High School /TURKEY

Amalie Emmy Noether

Student's artwork or the picture from the Internet (portrait of the chosen female mathematician)



Achievements in the field of mathematics:

Her father is mathematician Max Noether. After passing the exams, he planned to teach French and English, but eventually studied mathematics at the University of Erlangen in his father's class. After completing his thesis in 1907 under the supervision of Paul Gordan, he worked for seven years at the Mathematical Institute of Erlangen. (At that time, women were excluded from academic positions.) In 1915 he was invited by David Hilbert and Felix Klein to participate in the world famous mathematics found at the University of Göttingen. But he was rejected by the university, and he continued for another four years on Hilbert's name. The right to teach was granted in 1919, whereby he was able to assume the title of Privatdozent (in Germanic universities the title means that the owner can teach independently with the post of professor). He continued the exchange among leading Fellows of the Göttingen mathematics department until 1933; his students were sometimes called the "Noether boys". In 1924 he became a student of the Dutch mathematician B. L. van der Waerden and soon became the leading interpreter of Noether's work; The 1931 textbook written by Noether's test student formed the basis of the second volume of Modern Algebra. Until his participation in the 1932 Zurich International Mathematicians Congress, his algebraic abilities were recognized all over the world. The following year, the German Nazi government removed Jews from university positions and Noether moved to the United States to take up a position at Bryn Mawr Universities in Pennsylvania. He underwent surgery for a cyst in his ovaries in 1935, and died at the age of 53, despite signs of recovery.

<p>Name and surname of female mathematician:</p> <p>Amalie Emmy Noether</p>	<p>Articles and books:</p> <p>Noetherian Noetherian phrase Noetherian ring Noetherian module Noetherian space Noetherian indication Noetherian scheme Noether normalizing lemma Noether problem Noether's theorem Noether's second theorem Lasker - Noether theorem Skolem - Noether's theorem Albert – Brauer – Hasse – Noether theorem</p>
<p>Place of birth:</p> <p>Erlangen</p>	<p>Awards and recognitions</p> <p>Noether advised more than a dozen doctoral students in Göttingen. One of his first students was Grete Herman, who defended his thesis in February 1925. Noether also added to Max Deuring, a still undergraduate student who later contributed to the field of arithmetic geometry; Fitting theorem to Hans Fitting remembered with fitting lemma; He advised Zeng Jiongzhi, who proved Tsen's theorem. He worked closely with Wolfgang Krull, who developed commutative algebra with Hauptidealsatz and his dimensional theory for the commutative ring.</p>
<p>Date of birth:</p> <p>23 march 1882</p>	<p>What were her obstacles?</p> <p>She underwent surgery for a cyst in her ovaries in 1935, and died four days later at the age of 53, despite signs of recovery.</p>
<p>Date of death:</p>	

14 april 1935		
Famous male contemporaries: Bertrand Russell		Interests beyond mathematics: art, technology
Famous female contemporaries: Sofia Kovalevskaya		Why did you choose her? few women mathematicians in his age, interests, interest in algebra
Your name, school, country HALİL KAYALAR, DERBENT HIGH SCHOOL ,TURKEY		

HÜLYA ŞENKON

*Student's artwork or the picture from
the Internet
(portrait of the chosen female
mathematician)*



Achievements in the field of mathematics:

He started his education in Mathematics-Physics at Istanbul University in 1959. He started working as an assistant assistant in the Department of Mathematics in the last year of his education; He graduated from the faculty in 1963.

He was appointed to the same department as an assistant in January 1966. transcendental number theory school of the founder of Turkey, Orhan Shero smoker's consultation on "5 of algebraic and transcendental Solved order Problems with Method Grade Equation" on graduate work in 1972 again perafettin smoker's consultation on the "complex and pain we Field on Algebraic Arithmetic Meaning of Two Functions He completed his doctoral dissertation on "Some Results Regarding His Commitment and Their Application to Several Proofs of Irrationality". During his studies, he started learning German and French as well as English, then he learned Italian and Russian. After successfully completing his foreign language courses, he went to Germany and Italy with the scholarship he received. He was appointed as a professor in the same department. In 1990, he published his two-volume "Abstract Algebra Lessons" book, which was published by the Istanbul University Science Faculty Printing House.

He served as the Director of the Istanbul University Faculty of Science Nazım Terzioğlu Mathematics Research Center (1984-1988), the Department of Algebra and Number Theory, the Head of the Department of Mathematics (1991-1994), and the Chairman of the Editorial Board of the Mathematics Journal of the Istanbul University

	<p>Faculty of Science. In 1989, he became the general secretary of the Turkish Mathematical Society. After retiring on August 16, 1999, he worked at Istanbul Kültür University Department of Mathematics-Computer and Air Force Academy.</p>
<p>Name and surname of female mathematician:</p> <p>HÜLYA ŞENKON</p>	<p>Articles and books:</p> <p>Abstract Algebra Lessons</p>
<p>Place of birth:</p> <p>İSTANBUL</p>	<p>Awards and recognitions</p> <p>Didn't encounter any obstacles</p>
<p>Date of birth:</p> <p>13 JULY 1941</p>	<p>What were her obstacles?</p> <p>After his doctorate, he continued his work on "The Contrast of the Einstein Theorem by Schneider" and published two articles on his results. He became associate professor in November 1977 and was appointed to the same professor position in October 1988.</p>
<p>Date of death:</p> <p>15 FEBRUARY 2008</p>	<p>Interests beyond mathematics:</p> <p>PHYSICS, ENGLISH, RUSSIAN, COMPUTER</p>
<p>Famous male contemporaries:</p> <p>Terence Tao</p>	<p>Why did you choose her?</p> <p>being a Turk, being a woman, being interested in science in political events in his days, being a student of ignorant arf</p>
<p>Famous female contemporaries:</p> <p>Maryam Mirzakhani</p>	<p>Your name, school, country</p> <p>Tuğba CAMDERE, DERBENT HIGH SCHOOL , TURKEY</p>



FEMALE MATHEMATICIANS - IS THERE ANY?

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