

Three(3) great mathematicians and their contributions to mathematics



By. Brandon Spencer©

A R C H I M E D E S

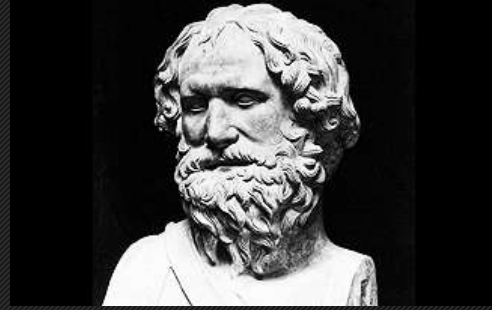
- ❑ Born 287 B.C. In Syracuse, Archimedes is universally known to be the greatest of the greatest in ancient mathematics.
- ❑ Archimedes studied at Euclid's school and his work surpassed the work on Euclid by far.
- ❑ His achievements were given brilliance given the lack of good mathematically knowledge going on in his time period.
- ❑ Archimedes made many advances in subjects such as; Number Theory, Algebra and Analysis, but is most renowned in many theorems of plane and solid geometry.
- ❑ Archimedes was known to have discoveries known only second-hand

ARCHIMEDES (CON.)

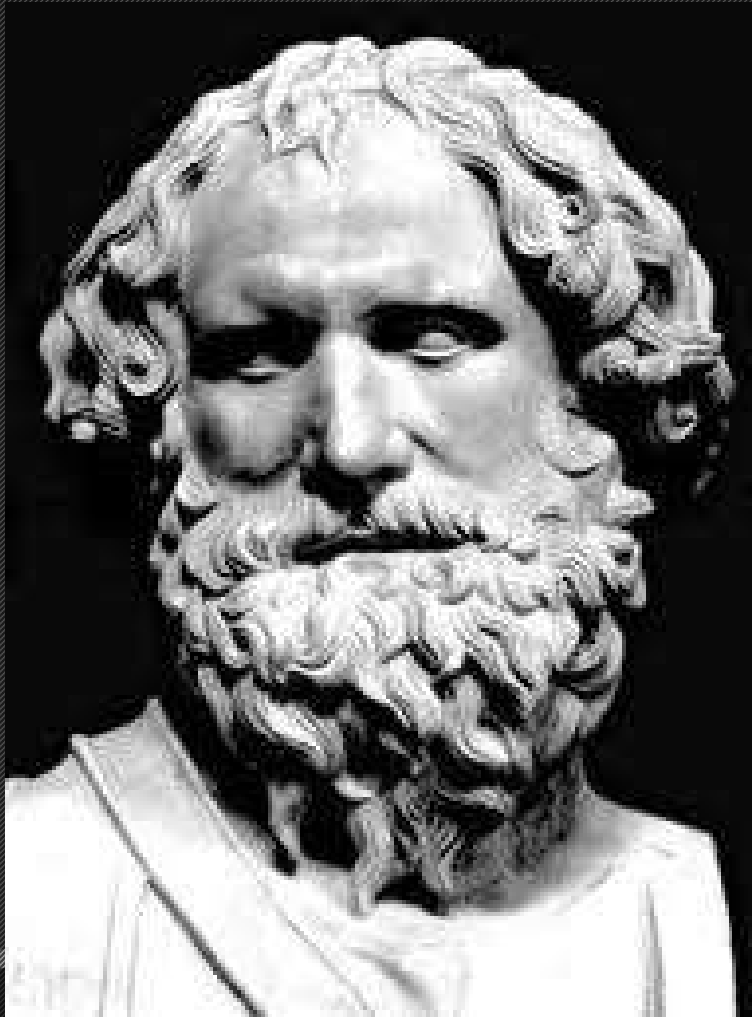
- ❑ Archimedes anticipated integrals calculus, most notably by determining the center of mass; hemisphere and cylindrical wedge, and the wedge, and the volume of two cylinders' intersection.
- ❑ Archimedes devised geometrical proofs for publication.
- ❑ Archimedes proved that the volume of a sphere is two-thirds the volume of a circumscribing cylinder. He also made a request that there need a representation of such a sphere and cylinder be placed on his tomb.

ARCHIMEDES (CON.)

- ❑ Archimedes discovered the formula for volume and surface area of a sphere and may have been the first to notice and proved the simple relationship between a circle's circumference and area.
- ❑ Archimedes died 212 B.C. Archimedes was too far ahead of his time and had great historical significance.



THE GREAT ARCHIMEDES



Johannes Kepler

- Born December 27, 1571 A.D. In Germany Johannes wanted to be an astronomer at a very young age, then studied to become a Lutheran minister then later decided to become a professor of mathematics instead.
- Kepler made other contributions from works of other former mathematicians like; He generalized Alhazen's Billard problem, developing the notion of curvature. Also he discovered that there were only 13 "Archimedean Solids."
- Kepler was also a scientist that made many discoveries and corrected many theories that had failed or no back-up proof of it even existed at all.

Johannes Kepler (con.)

- Kepler in addition to his physics and mathematics, Kepler wrote a novel over science fiction, and was an astrologer and mystic.
- Kepler's ideas were very similar to Pythagoras about the idea of numbers and the ruling of the cosmos.
- Kepler's mystic beliefs were the cause of his mother to be imprisoned due to the reason of thought that she was doing witchcraft.
- Kepler developed methods on Fermat's Theorem ($df(x)dx=0$ at function extrema).

Johannes Kepler (con.)



Kepler once used rudimentary calculus to deduce which barrel shape would be the best bargain for wine.

- Kepler died November 15, 1630 A.D. Kepler had many problems and problems but he is still one of the great mathematicians known.

Johannes Kepler



Amalie Emmy Noether

- ❖ Born March 23, 1882 A.D. in Germany. Noether was an innovative researcher who was considered the greatest master of abstract algebra.
- ❖ Noether's novel with reasoning methods consisted of advanced invariant theory and abstract algebra.
- ❖ Noether's work has found various applications in physics, and she made direct advances in mathematical physics herself.
- ❖ She established that only certain symmetries imply conservation laws has been called the most important Theorem in physics since the Pythagorean Theorem.

❖ Her first name was "Amalie" after her mother and paternal grandmother, but she began using her middle name at a young age. As a girl, she was well liked. She did not stand out academically although she was known for being clever and friendly. Emmy was near-sighted and talked with a minor lisp during childhood.

❖ First and foremost Noether is remembered by mathematicians as an algebraist and for her work in topology.



Amalie Emmy Noether

❖ Emmy Noether, was an influential

German mathematician known for her

contributions to abstract

algebra and theoretical physics.

She was born on March 14, 1882, and died on March

14, 1935 A.D. Many

consider Emmy Noether was the

greatest mathematician ever.

Amalie Emmy Noether



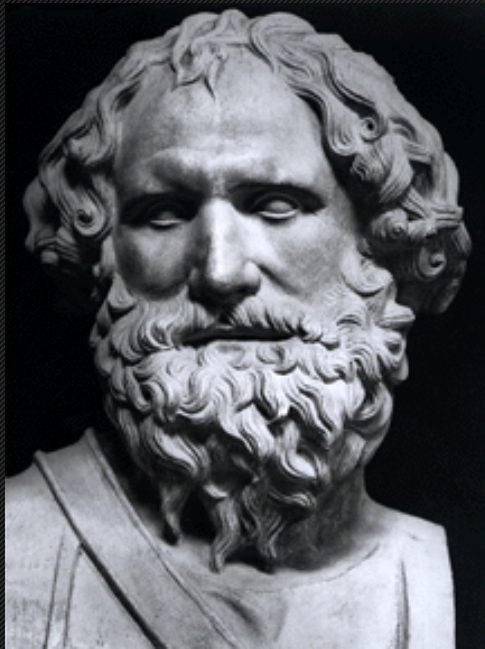
Amalie Emmy Noether



Great Mathematicians!

Archimedes, Johannes Kepler,

Amalie Emmy Noether



Sources

<http://www.fabpedigree.com/james/mathmen.htm>

<http://www.wikipedia.org>

- Archimedes(Male 400-1580)
- Johannes Kepler(Male 1581-1750)
- Amalie Emma Noether(Female 1751-1920)

Pictures- www.google.com