

At the door of Plato's Academy reads:  
*Let no one ignorant of geometry enter here*

# Mathematics universal knowladge

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Mathematics objective and universal knowladge, independent of time and space,  
 Let us note that the statement

$$2 + 2 = 4$$

is true without exception who speaks, when speaks and where speaks

Mathematics is universal knowladge different of sience subjects such as biology, chemstry and physics, which cocern materialistic world. Mathematics exists in the sense of form, numbers and their functional relations. According to the ancients, Plato i Phytagoras, *Mathematics* exists in the *Ideal World of God's Beings*.

## Ancients Mathematics

Socrates (469-399 B.C.) from Aten farther of phylosophy, teacher of Plato, aristotle and others ancients deserved for generations

He taught without compensation that no salary should be paid for teaching.

- Socrates regarded mathematics as the most important knowledge revealed in the cognition of reality..

- He taught about democracy and social justice, for which he was sentenced to death by tyrants from the opposition.
- Friends wanted to buy Socrates from prison and take them to the island, but Socrates he chose death.
- Tyrant gave Socrates a drink of poison that he consciously drank in jail.
- Socrates all life passed in some sandals.

Mathematics next to Astronomy is the oldest area of knowladge that is cognized, learned and used by generations.

The earliest text written on the clay board Plimpton 322 (Babylon, circa 1900), contains a table for the addition and multiplication of natural numbers and three numbers of Pythagorean numbers.

After the fall of Alexander the Great, the Egyptian and Sumerian mathematician would still be taught by the Greek in popular schools.

- Jonian School of Astronomy and Philosophy (Tales 625-545 BC)
- Pythagorean School (569-500 BC)
- Plato's Academy (429-348 BC)

At the entrance to the Academy reads:

*"Let no one ignorant of geometry enter here"*

- University of Alexandria (330-275 BC)

When Alexander the Great won the world, he built the most cosmopolitan city Alexandria in Egypt. Then there was first university with lecture rooms and *Alexandrian Library*. Teachers from many countries and cultures, Greek and Israeli, Babylonians, Syrians and Egyptians were employed at the University of Alexandria.

Between them

- Euclid (330-275 BC), Dean of the department of the study of Arithmetic and Geometry,
- Archimedes (287-212 B.C.) considered one of the three greatest mathematicians of all time alongside Isaac Newton and Karol Gaußs.

The above-mentioned schools were based on the temporal existing only in time and space and on the *Ideal World* existing beyond time and space.

### **Mathematics in the Culture of Christianity**

In fact, in the Middle Ages, knowledge - science was created by people who had a deep faith. All of them there were educated in the parish, monastery of Jesuit, benedictines and others.

- Mikolaj Copernicus, Fr. The Canon of the Chapter of Warmia published on the day of the day about the cognitive value of "On the Revolutions" (1543)
- Galileo educated at the Jesuit School. His two daughters were religious sisters,
- Johannes Kepler studied theology published "Planets traffic law (1609),
- Isaac Newton (1643 – 1727) deeply religious and a zealous researcher in the Bible, believed in one Almighty God. In seventeen century Isaac Newton had been created the calculus of infinitely small, the basics of the differential calculus. He had also published the fundamental laws of gravitation .
- Even Charles Darwin (1809 – 1882) did not deny the existence of Creator God. In the book *On the Origin of Species by Natural Selection* (1859), he published theory of evolution, that atheists used for their naive interpretation.

### **Mathematicians in Middle Ages**

- Blaise Pascal (1623 – 1662) French mathematician, physicist and philosopher of religion, follower of the idea of Augustine. Pascal built first mechanical computer and published the bases of the probability theory.
- René Descartes (1596 – 1650) basic education earned at Jesuit College. René Descartes created basics of Analytical Geometry.

Descartes published a new direction of philosophy called *Dualism*.

For the Swedish Prince Krystyna, he had written the book treatise *Passions of Soul*

- Leonhard Euler (1707-1783), the son of the pastor, he studied philosophy and theology published numerous discoveries in many branches of mathematics and physics. Euler published many volumes of his research in the field of calculus, theory of graphs, mechanics, optics and astronomy.

- Karol Gauss, (1777-1855) one of the three greatest mathematicians of all time, alongside Archimedes and Newton at the age of 15, he gave complete proof of fundamental theorem of algebra.

Gauss's strong belief in the highest of all things, in one, eternal, just, all-powerful and omnipotent God, would be the foundation of his religious life

- Ludwik Cauchy (1789-1857) the author of the theory of Complex Functions and the most exact definition of a limit. In spite of his numerous academic activities, he was an active member of the Saint Vicent a Paulo Society, who visited and supported the poor. In one of his brochures we find the confession of Cauchy's faith:

*I am a Christian with all great astronomers and all great mathematicians of the past century. I am so with majority of Catholics. And if anyone asks me for the reasons of my faith, I will very much willingly exchange the words. My religious beliefs are not based on superstition, but on deep research and analysis.*

The Christians remained in the vanguard of scientific discovery until the 19th century. Groundbreaking achievements in astronomy, biology, chemistry, physics, mathematics, microbiology, medicine, genetics and atomic theory are the result of works by scientists, who believed in the only Creator God, and their achievements were based on the Christian faith.

All the scholars mentioned above are giants of science, in the truest sense of the word. They have discovered and formulated the laws revealed to them in the conviction that

*"God Created and Continues to Create the Visible World."*

In conclusion, we note that mathematics is widely used in basic research and large projects, including engineering projects for building skyscrapers, bridges, ships, planes, spacecraft and airports, mathematical models in medicine, in the army, in management and administration, and in many other projects.

Expectations for new specialties and discoveries generated by Mathematics are growing. Many highly qualified professional workplaces have been created in the subject of Mathematics and in related subjects.

Mathematics studies are a very good choice of direction and guarantee a stable and attractive work for many ambitious high school graduates.

Let us note that studies do not stop learning. The period of work and further education for remuneration begins.

On the way of advancement, teachers have the duties of continuous learning in the field of didactics and new specialties. Academic teachers have more the freedom to manage time, but in addition to the duties of lectures and exercises, they have a duty to research work, write publications, on average two publications per year needed for professional promotion.

After I've been working for 50 years in the subject of mathematics. I have published in mathematics over 50 articles and academic handbooks, not only for the sake of want and satisfaction, but mainly for the need of work continuity and promotion.

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