

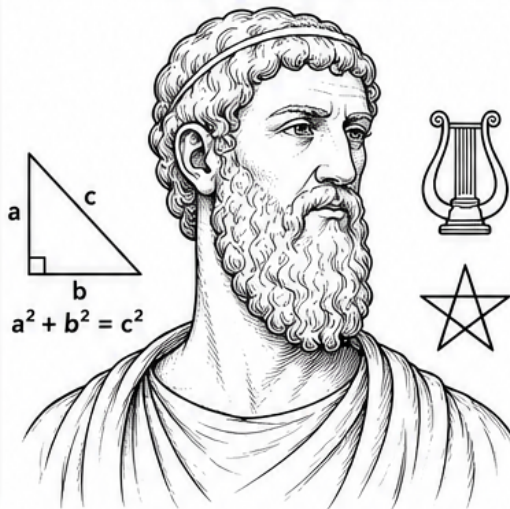
PYTHAGORAS

c. 570 – c. 495 BCE

GREAT GREEK MATHEMATICIAN,
PHILOSOPHER AND TEACHER

LIFE

- Pythagoras was born on the island of Samos, in Greece, around 570 BCE.
- Ancient writers say he travelled to Egypt and may also have visited Babylon.
- He later settled in Croton, in southern Italy.
- He founded the Pythagorean Brotherhood, a community with shared rules and a way of life.
- Pythagoras was a mathematician, philosopher, teacher and spiritual leader.
- He died around 495 BCE.

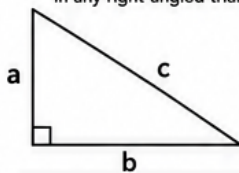


ACHIEVEMENTS

- Ancient tradition credits Pythagoras or his followers with proving or popularising the theorem that now bears his name.
- Believed that numbers and harmony explain the world and music.
- Believed that the heavens follow mathematical harmony.
- Founded the Pythagorean Brotherhood, where students lived together and followed rules of respect and friendship.
- His ideas influenced mathematics, philosophy and science for more than 2,500 years.

THE PYTHAGOREAN THEOREM

In any right-angled triangle:



$$a^2 + b^2 = c^2$$

The square of the hypotenuse (c) is equal to the sum of the squares of the other two sides (a and b).

This rule is used in maths, building and many areas of everyday life.

The theorem is named after Pythagoras because ancient tradition connects it with him and his followers.

NUMBERS AND HARMONY

Pythagoras believed that numbers are the key to understanding everything.



He studied how musical notes create harmony.



Pythagoreans believed the heavens follow mathematical harmony.



The sacred tetractys

$$1 + 2 + 3 + 4 = 10$$

He explored number patterns and figured shapes, seeing beauty and order in them.

THE PYTHAGOREAN BROTHERHOOD

Pythagoras founded a community where students lived together and followed important rules.



- ★ Respected each other and lived simply.
- ★ Studied maths, music, science and philosophy.
- ★ Kept some discoveries secret.
- ★ Practised kindness, honesty and self-control.

WHAT PYTHAGORAS TAUGHT

- Loved learning and sharing knowledge.
- Believed in thinking carefully and asking questions.
- Thought balance and fairness were important in life.
- Encouraged a healthy body and a peaceful mind.
- His teachings were about wisdom, friendship and living a good life.

FAMOUS IDEAS AND DISCOVERIES

- The Pythagorean Theorem
- Number patterns (e.g., triangular numbers)
- The idea that numbers bring order
- The connection between music and maths
- Some Pythagoreans believed the Earth was spherical

These ideas changed the way people thought about maths, nature and the world.

LEGACY

Pythagoras' ideas have been used for thousands of years.

- The theorem named after Pythagoras is taught in schools around the world today.
- His thoughts on numbers and harmony inspired many great thinkers.
- His community became one of the most influential philosophical groups in Magna Graecia.
- His name is remembered around the world because of the amazing ideas linked to him.



THE LIFE OF PYTHAGORAS

c. 570 BCE

Born on the island of Samos, Greece.



c. 550s BCE

Ancient writers say he travelled to Egypt and may have visited Babylon to study.



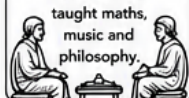
c. 530s BCE

Settled in Croton, in southern Italy.



Founded the

Pythagorean Brotherhood taught maths, music and philosophy.



c. 500s BCE

His community became famous and many students joined.



c. 495 BCE

Died in Croton, around the age of 75.



DID YOU KNOW?

The theorem named after Pythagoras is one of the best-known ideas in mathematics and is used every day all around us!



KEY WORDS

Mathematician – a person who studies numbers and shapes.
Philosopher – a person who thinks deeply about life and the world.
Harmony – a pleasing combination of sounds.
Brotherhood – a community that lives and learns together.
Theorem – a rule in maths that can be proven true.

AMAZING FACT!

Triangular numbers were studied by Pythagoras. Add the first 4 numbers and you get a triangle of 10 dots!

$$1 + 2 + 3 + 4 = 10$$

