

Pythagoras' Life and Contributions

Pythagoras was a famous philosopher, scientist, religious scholar¹, and a musician². He was born in Samos, Greece, some websites say in the year 575 B.C.E.¹ (Before Common Era), while others say his year of birth is not exactly known and he was born sometime around 570 B.C.E.² After he studied in Greece he traveled to Egypt and Babylon to learn more about mathematics and astronomy. Back in Greece, Pythagoras founded a philosophical and religious school in the city of Croton. His followers were called Pythagoreans. Pythagoras died sometime in the end of the fifth century (around 495 B.C.E).

The religious views of Pythagoras and his followers were that the soul never dies, and it goes through a cycle of rebirth. The cycle ends when the soul has had a 'pure' life. He viewed his philosophical system as a way of life that would lead humans to salvation and deliver them from sin. He also believed there was a universal spirit in animals and plants, and that human souls could be reborn into animals. Pythagoras also believed the earth was a sphere that circled the center of the universe, which was very different from the world views at that time.¹

In regard to music, Pythagoras played an instrument called the lyre. He noticed that when strings of different lengths were plucked, they made different tones. From this, he created the music scale that is still used today.²

Pythagoras was most well-known for his contributions to mathematics. He and his followers stated life is controlled by opposite forces, Limited and Unlimited, called dualism.¹

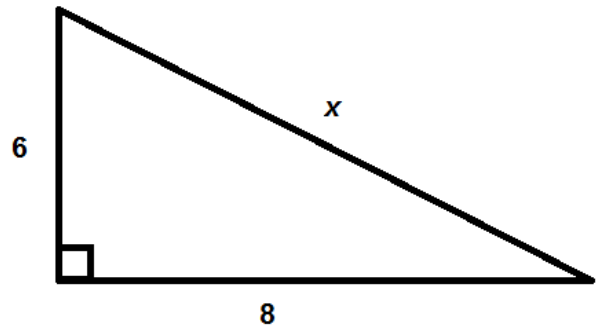
¹ 'Pythagoras Biography', *Encyclopedia of World Biography*, 2020 <<https://www.notablebiographies.com/Pu-Ro/Pythagoras.html>>.

² acavis, 'Pythagoras And The Pythagorean Theorem', 2008 <<https://www.slideshare.net/acavis/pythagoras-and-the-pythagorean-theorem>>.

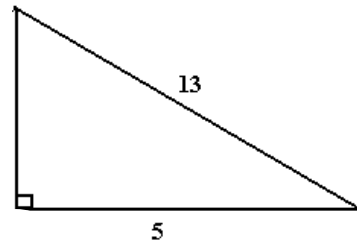
Odd and even numbers are considered a type of Limited and Unlimited, as are left and right, motion and motionless, light and darkness, and straight and crooked. Pythagoreans also worked with perfect, prime, and irrational numbers, as well as theorems about triangles, parallel lines, and circles.² The theorem Pythagoras is famous for, might have been created by someone else as it was found on a stone around the time of 1750 B.C.E.¹ The Pythagorean theorem states “the square of the hypotenuse of a right triangle is equal to the sum of the squares of the other two legs (sides).”

Here are some practice problems for his theorem:

1. Find the length of the hypotenuse:



2. Find the length of the leg:



3. Find the values for x , y , and z :

