# Pythagoras and Pothyanar

#### Pythagoras

Pythagoras, an ancient Greek philosopher, polymath and eponymous founder of Pythagoreanism. He is born in about 570 BCE (Before Christian Era ) on the island of Samos and died at Metapontium, in modern-day Italy, about 500 to 490 BCE. Pythagoras had a wife called Theano who also a philosopher, as well as a physician and administrator and he had a daughter called Damo, who also took up her parents profession. Pythagoras was credited with many mathematical and scientific discoveries, including the Pythagorean theorem, Pythagorean tuning, the five regular solids, the Theory of Proportions, the sphericity of the Earth, and the identity of the morning and evening stars as the planet Venus. His most popular theorem was the Pythagorean theorem and it was first known in ancient Babylon and Egypt (beginning about 1900 B.C.). The relationship was shown on a 4000 year old Babylonian tablet now known as Plimpton 322. However, the relationship was not widely publicized until Pythagoras stated it clearly. It is said that Pythagoras discovered "his theorem" in a palace hall. He studied the stone square tiles when he was bored and pictured right triangles within the tiling. He recognized that the area of the squares on the side lengths were equal to the square on the hypotenuse. There are 3 facts about Pythagoras that I want to write here. 1. Historians believe that Pythagoras has a condition called synaesthesia. 2. Pythagoras believed that Earth has a round shape. 3. Pythagoras trusts that the human soul returns over and over again into different forms.

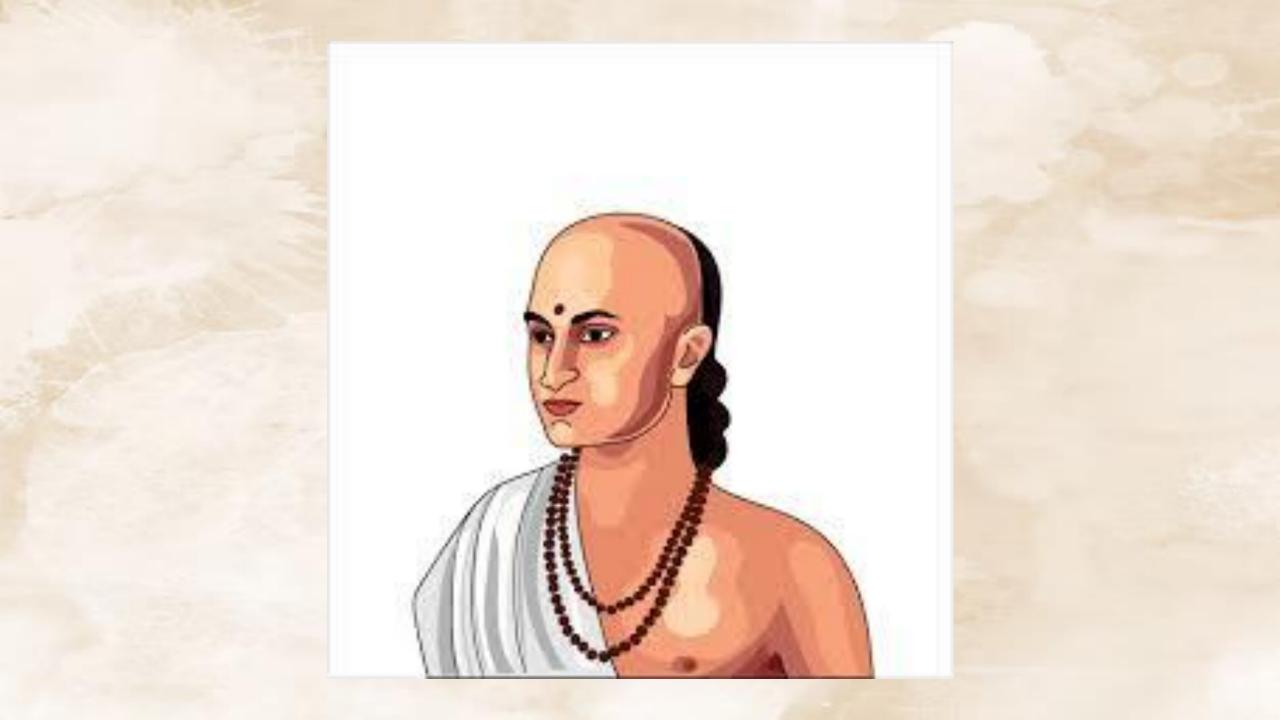


### Pothayanar

Pothayanar, Tamil Mathematician and poet, had discovered the relation between the sides of right angled triangle in 800 BCE before Pythagoras was born. He had given a formula for evaluating the hypotenuse of a right-angle triangle when two sides are given. We may fail to acknowledge mathematical genius of Pothayanar. but that in no way makes him a lesser genius than Pythagoras.

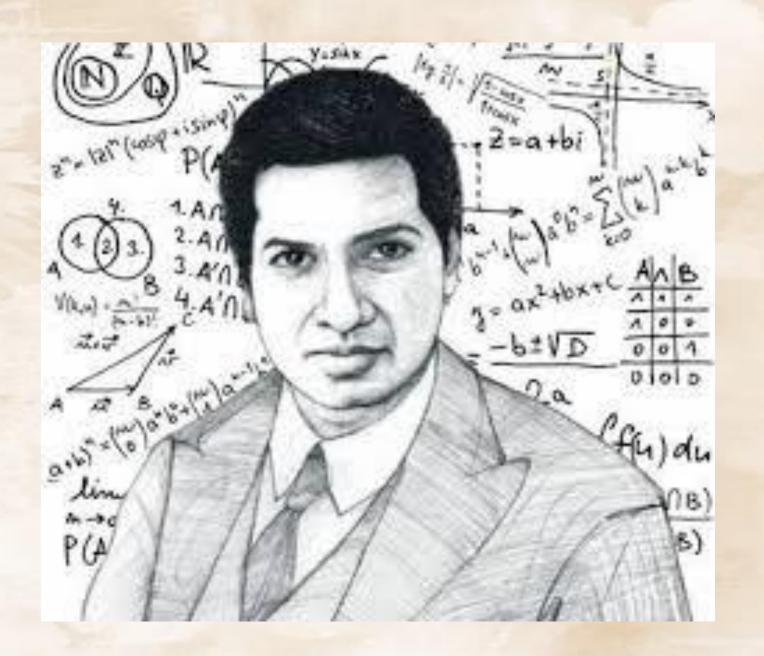
#### Aryabhata

Aryabhata or father of Indian Mathematics was a Indian mathematician, astronomer, writer, astrologer and literary scholar and was born in 476 AD ( After the death of Jesus Christ ) in Pataliputra and completed his studies in Kusumapura. Aryabhata was the head of a Kusumapura institution and was also the head of the Nalanda University in Bihar, because the university was located near Patliputra and housed an astronomical observatory. He invented many things including the solar system rotation, approximation of pi, trigonometry, algebra, place value system and zero. One of his famous works is Aryabhatiya, a magnum opus written in the Sanskrit language and the only known surviving work of Indian mathematician Aryabhata from the fifth century. His work includes the Arya-Siddhanta, a lost treatise on astronomical calculations, Varahamihira, Bhaskara, and Brahmagupta. The discoveries made by the Aryabhata were impactful. Aryabhata gained worldwide recognition as a legendary mathematician.



#### Srinivasa Ramanujan

Srinivasa Ramanujan was an Indian mathematician and was born in 1887 and died in 1920 at the age 32. He was married to Janaki Ammal who was the first woman Indian botanist. He created the mathematical analysis, infinite series, continued fractions, number theory, and game theory. At age 15 Ramanujan obtained a mathematics book containing thousands of theorems, which he verified and from which he developed his own ideas. In 1903 he briefly attended the University of Madras. In 1914 he went to England to study at Trinity College, Cambridge, with British mathematician G.H. Hardy. For some reason, Ramanujan often fasted for long periods of time, and was known to avoid certain foods based on their perceived mathematical properties. There's no doubt that Srinivasa Ramanujan was an impeccable mathematical genius.



## Thanks for listening