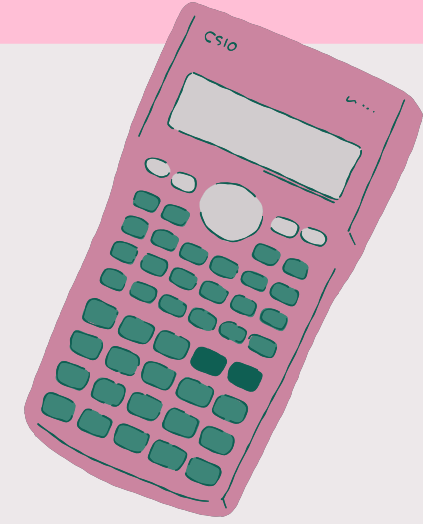


π



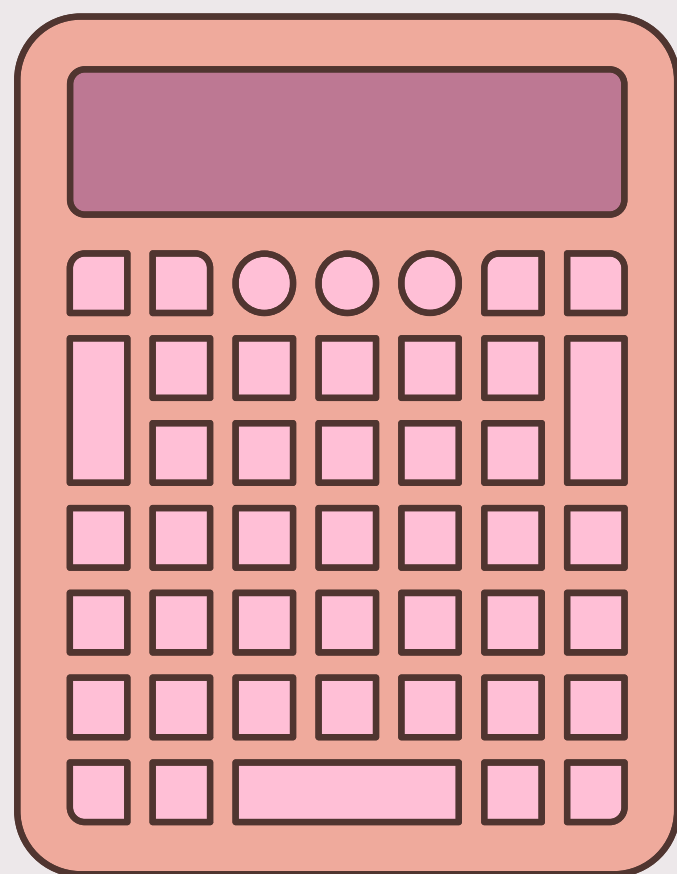
$\frac{1}{2}$

COMPARISON BETWEEN POTHAYANAR AND PHYTHAGORAS

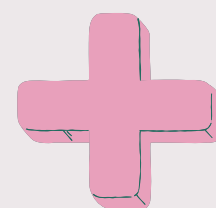
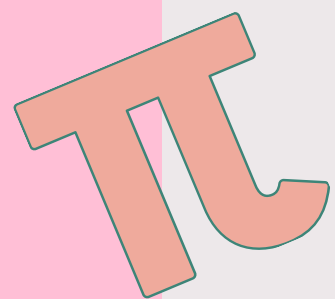
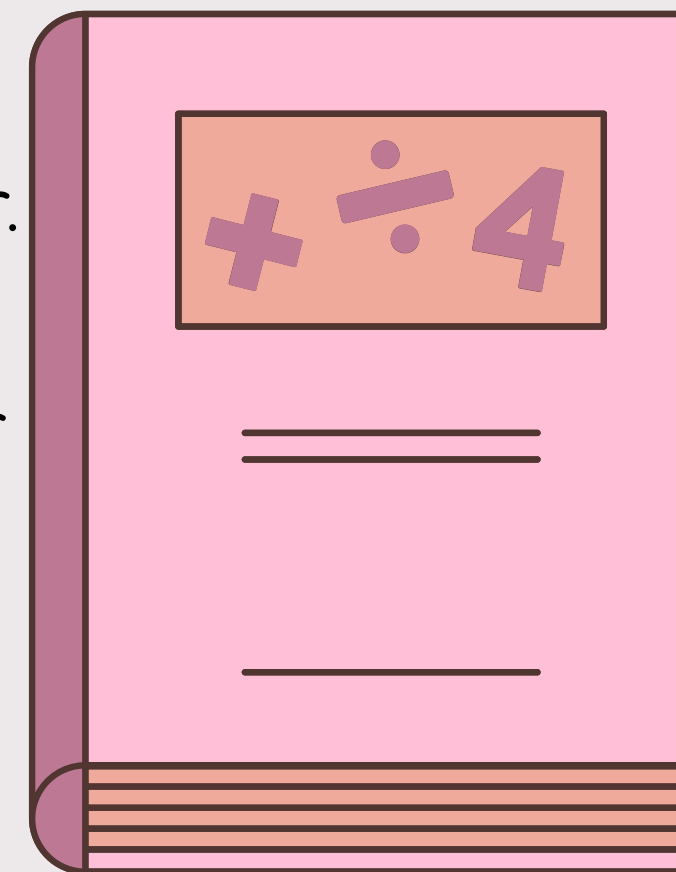
By Pranjali Joshi

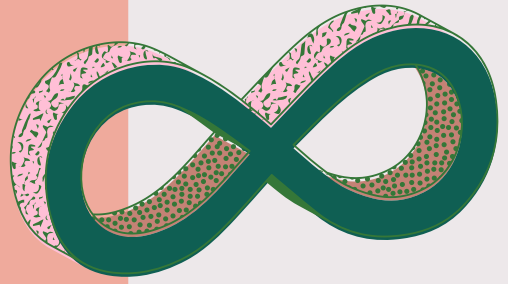


AIM OF THIS PRESENTATION

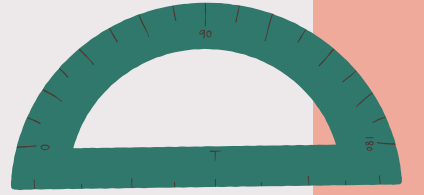


1. To know about Indian mathematician Pothayanar.
2. To compare in Indian Mathematician Pothayanar and Greek Mathematician Pythagoras.

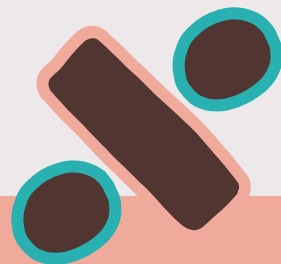




POTHAYANAR



(Pothan Janardhanan) Pothayanar also known as Baudhayana (800 BC - 740 BC) is said to be the original Mathematician behind the Pythagoras theorem. Pythagoras theorem was indeed known much before Pythagoras, and it was Indians who discovered it at least 1000 years before Pythagoras was born! Pothayanar must have been a great mathematician, who got lost like fruit hidden in the foliage the tree.

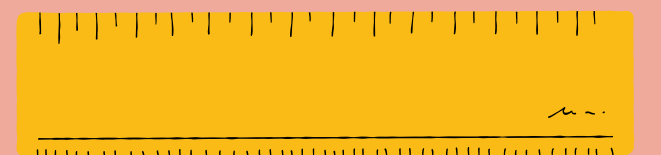


PYTHAGORAS



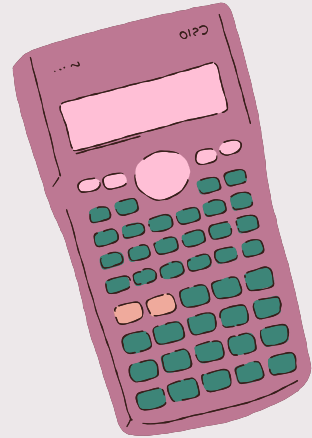
Pythagoras was an ancient Greek mathematician and philosopher known for the Pythagorean theorem.

His teachings in mathematics and philosophy emphasized the harmony of the universe and the importance of numbers. He founded Pythagoreanism, a philosophical movement that influenced Western thought and laid the groundwork for geometry and mathematical principles...



Pothanayanar

A 20th-century Malayalam writer known for humorous and satirical works, highlighting human behavior and society in Kerala, India. Pothanayanar's legacy lies in Malayalam literature, critiquing society through humor.

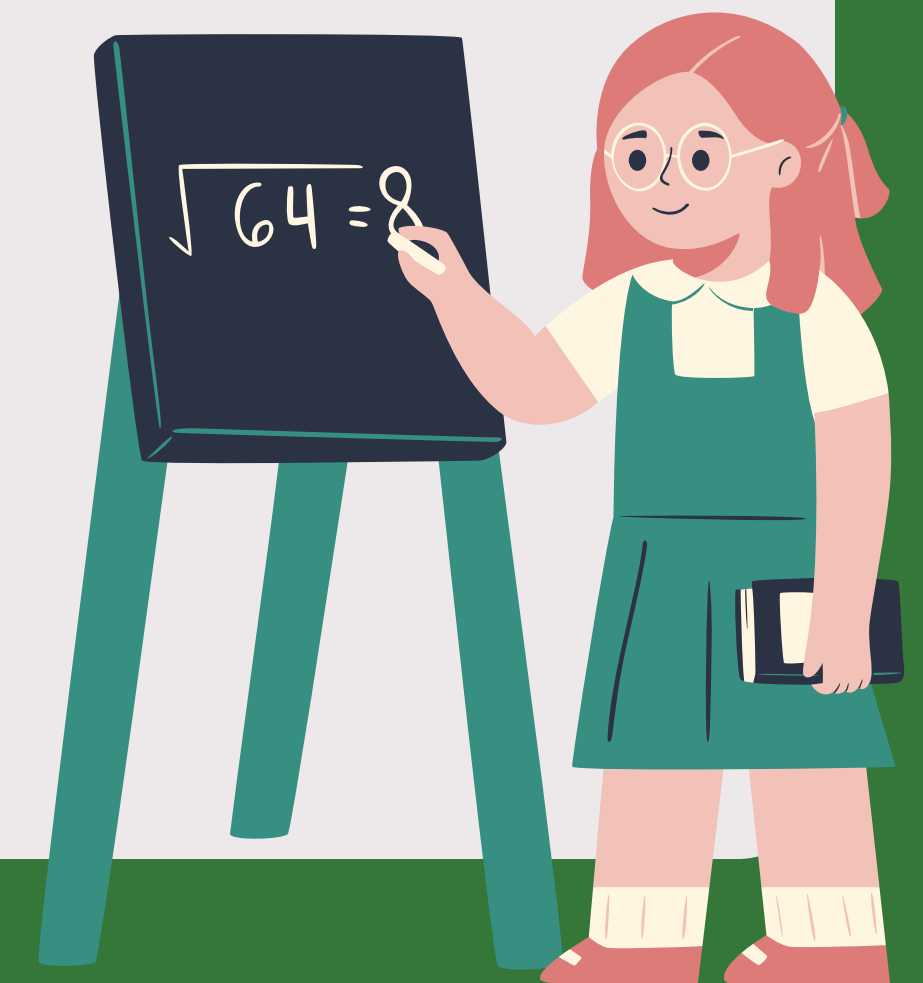
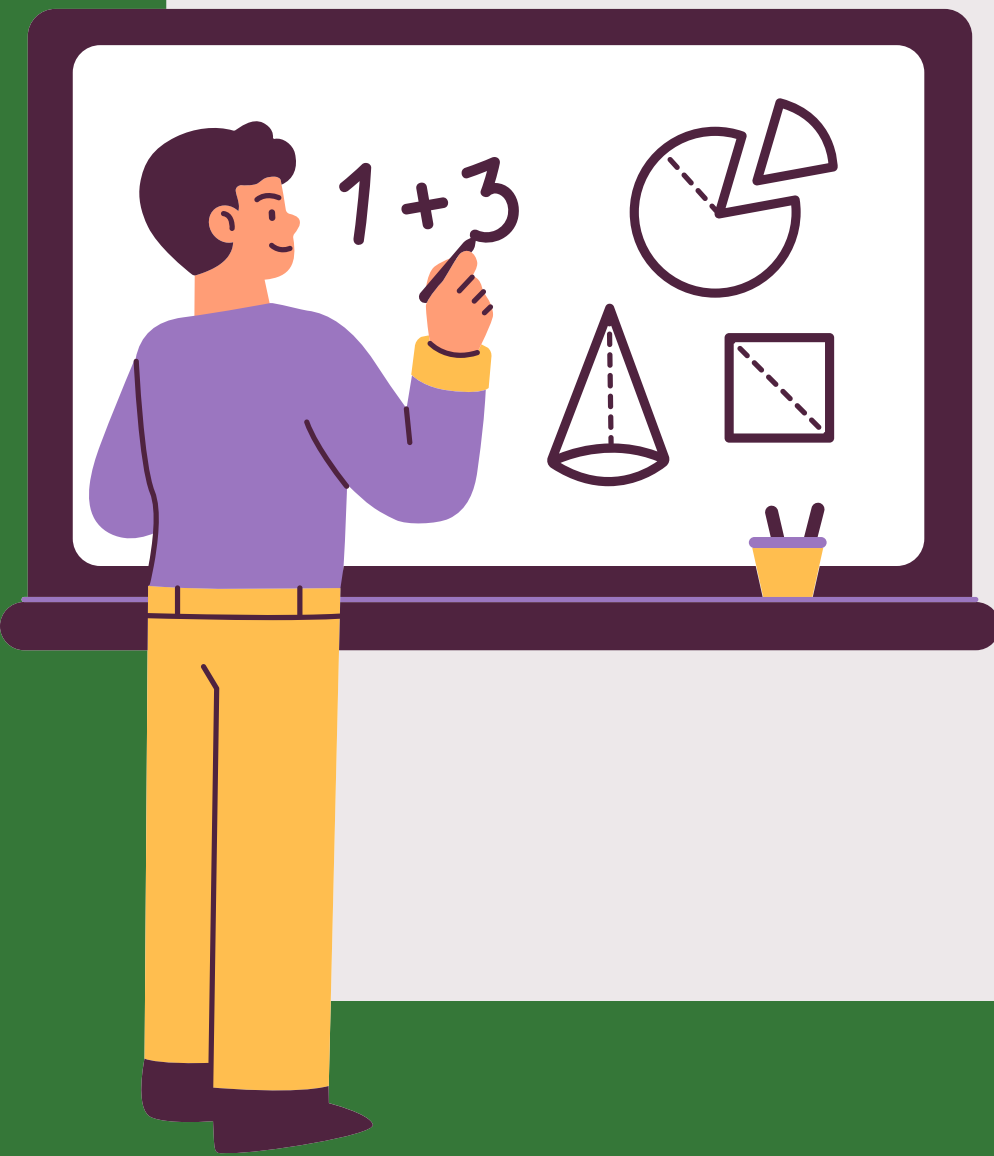


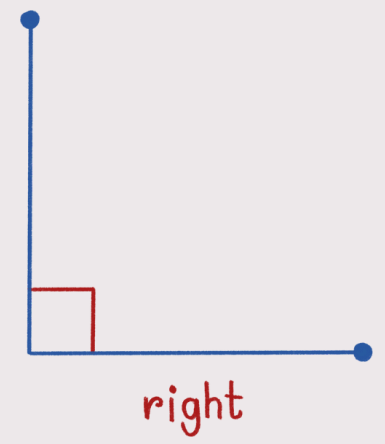
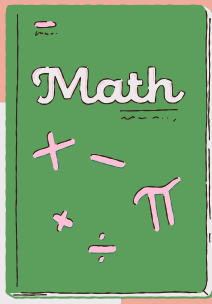
Comparison

Pythagoras

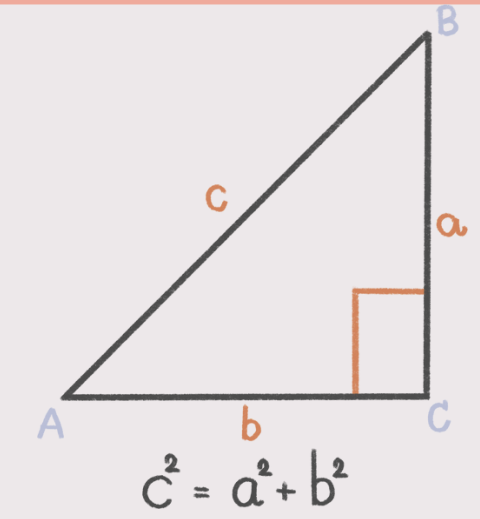
An ancient Greek mathematician and philosopher famous for the Pythagorean theorem and founding Pythagoreanism, influencing mathematics, philosophy, and music theory.

Pythagoras influenced Western philosophy and mathematics significantly, with his theorem and philosophical ideas.





PYTHAGORAS' THEOREM AND POTHAYANAR'S THEOREM

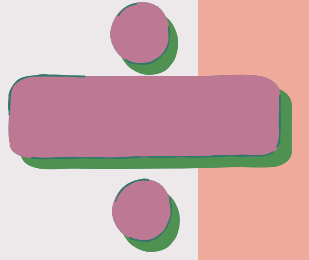
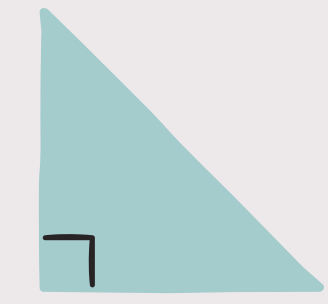


In mathematics, the Pythagorean (Pythagoras) theorem is a relation among the three sides of a right triangle (right-angled triangle). It states "In any right-angled triangle, the area of the square whose side is the hypotenuse (the side opposite the right angle) is equal to the sum of the areas of the squares whose sides are the two legs (the two sides that meet at a right angle)."

Pythagoras theorem formula = $a^2 + b^2 = c^2$
The Pothayanar theorem works differently

Divide the horizontal into eight
delete one portion and add the remaining half of the vertical
the answer will be the hypotenuse of the triangle.

Pothayanar theorem formula = $A/8 + B/2 = C$



CONTRIBUTIONS OF POTHAYANAR

His contributions were exclusively within the domain of storytelling, humor, and social commentary through his novels, short stories, and essays. Pothanayanar's impact on Indian literature, particularly Malayalam literature, is significant for its cultural reflection and narrative style. Baudhayana is credited with significant contributions towards the advancements in mathematics. The most prominent among them are as follows: 1. Circling a square. 2. Value of π . 3. The method of finding the square root of 2.

CONTRIBUTIONS OF PYTHAGORAS

1. Pythagoras is credited with discovering the mathematical relationships in musical intervals, which laid the foundation for the study of music theory. He believed that these relationships mirrored the harmony found in the cosmos. Pythagoras and his school explored the properties of numbers, including odd and even numbers, primes, and triangular numbers. They also worked on geometric shapes and their properties.

CONTRIBUTIONS





CONCLUSION

We have all heard our parents and grandparents talk of the Vedas. Still, there is no denying that modern science and technology owes its origins to our ancient Indian mathematicians, scholars etc. Many modern discoveries would not have been possible but for the legacy of our forefathers who made major contributions to the fields of science and technology. Be it fields of medicine, astronomy, engineering, mathematics, the list of Indian geniuses who laid the foundations of many an invention is endless. We may fail to acknowledge mathematical genius Pothayanar but that in no way makes him a lesser genius than Pythagoras, while Pothanayanar and Pythagoras lived in vastly different times and contributed to different fields, both left enduring legacies in their respective domains—literature and mathematics/philosophy—through their innovative thinking and contributions to human knowledge.

THANK

YOU!

