3rd Junior

Maths

How many ways are there to prove the Pythagorean Theorem?

By Betty Fei

Watch the video and answer the questions

Then check on the web portal

Click to watch the video again

From which culture was the earliest recorded usage of the Pythagorean theorem found?

- A Greek
- B Indian
- C Babylonian
- D Egyptian

A rope that is stretched across the diagonal of a square is used as the side length of a new square. The new square has _____ area as the original square.

- A The same
- B Half the
- C Twice the
- D Triple the

Euclid's elegant proof of the Pythagorean theorem (also stumbled upon by Einstein) relies on which of the following principles?

- A Similar triangles have proportional corresponding sides
- B Congruent triangles have same side lengths and angles
- C Isosceles triangles have two equal sides
- D Angles of a triangle add up to 180 degrees

According to the converse of the Pythagorean theorem, stretching a rope knotted into 12 equal segments to form a 3-4-5-segmented triangle would ensure which of the following is created?

- A 30-degree angle
- B 45-degree angle
- C 90-degree angle
- D 120-degree angle

Which of the following sets of the numbers consists of a Pythagorean triple (whole numbers which satisfy the Pythagorean theorem)?

- A 3, 5, 6
- B 5, 12, 13
- C 8, 16, 17
- D 20, 21, 28

Answer orally

How were the principles of the Pythagorean theorem important to various ancient cultures around the world?

What are some practical applications of the Pythagorean theorem that impact our modern society?

Are there any types of surfaces for which the Pythagorean theorem would not be valid? If so, which ones?

LIVEWORKSHEETS