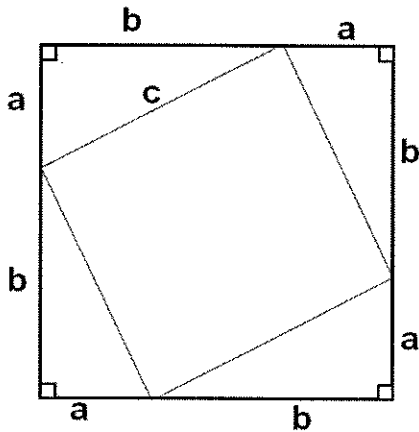## PROOF 1

Below is a visual proof of the Pythagorean Theorem. We can determine why the proof works by doing the following:

1)   a. Find the area of each of the 4 right triangles.

        b. Find the area of the <u>inside</u> square.

        c. Add all these together and simplify.

2)   a. What are the side lengths of the <u>big</u> square?

        b. Find the area of this square and simplify.

3) Set the expressions from #1 and #2 equal to each other. What do you notice?

PROOF 2

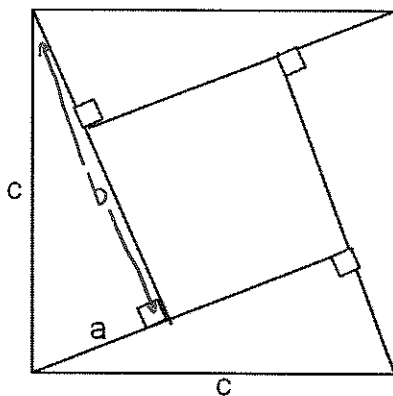Below is a visual proof of the Pythagorean Theorem. We can determine why the proof works by doing the following:

1)   a. Find the area of each of the 4 right triangles.

        b. What are the side lengths of the <u>inside</u> square? Find the area of this square and simplify.

        c. Add all these together and simplify.

2)   What is the area of the <u>big</u> square?

3) Set the expressions from #1 and #2 equal to each other. What do you notice?

Below is a visual proof of the Pythagorean Theorem. We can determine why the proof works by doing the following:

1) Determine the area of each of the smaller figures and add them together
2) Determine the area of the large figure
3) Set these two values equal

PROOF 3

a
b
c
c
a
b
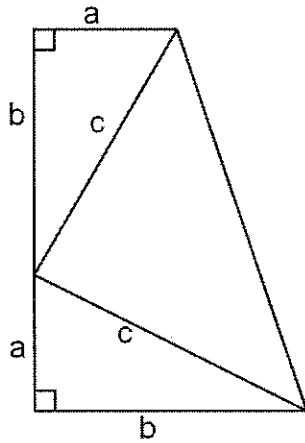
Below is a visual proof of the Pythagorean Theorem. Write a few sentences explaining how this proves the Pythagorean Theorem.

PROOF 4

a
a
b
b

a
c
c
b
a

c
c

c
c