

Greek Mathematics

Activity 1: The Pythagorean Theorem

Directions

- Let's start with a triangle that has a squared corner, called a "right" triangle.



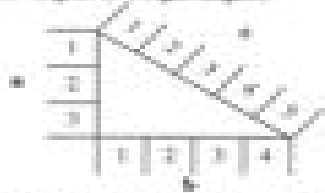
- Let's give each side a letter to identify it.



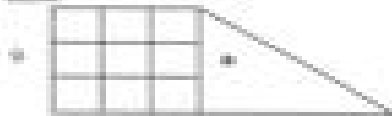
- Let's name the following:

- *a* has a length of 3 units
- *b* has a length of 4 units
- *c* has a length of 5 units

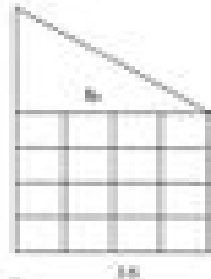
(This side *c*) is also called the hypotenuse, the longest side of the triangle, where neither of its angles is a right angle.)



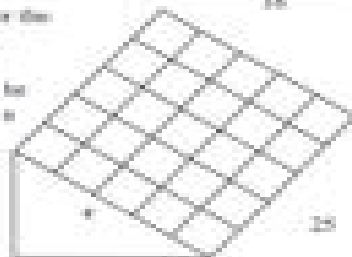
- After marking on this right triangle, Pythagoras drew squares off of each side. For side *a*, he noticed that he could make a square of nine units.



- For side *b*, Pythagoras noticed that he could make a square of 16 units.



- For side *c*, or the hypotenuse, Pythagoras noticed that he could make a square of 25 units.



- When he put them all together, it looked like this.

