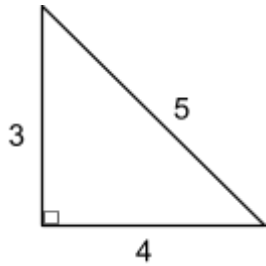


Interesting Fact About the Pythagorean Theorem:

Of course it's named after Pythagoras, who lived in ancient Greece about 400 BC. People knew about it way before him, though, in ancient Egypt. In fact, they used it to build the pyramids (and other buildings) and couldn't have done so without it! Yay math!

Here's what they did ... in order to make stones that were perfectly rectangular and would fit together smoothly, they needed to make sure they were carving the stones with perfect 90° angles. So they took a rope that had 12 knots in it spaced evenly. Then they made a triangle that was 3 knots on one side, four knots on the other side, and 5 knots on the final side, and pulled the corners tight.



Well: $3^2 + 4^2 = 5^2$
 $9 + 16 = 25$

Since the sum of the two short sides squared = the long side squared, the triangle has to be a right triangle! The ancient Egyptians knew this, and used the angle in between the two short sides to mark the stones they were carving up for the Pyramids!



The ancient pyramids at Giza were built around 2500 to 2600 BC, more than 2000 years before Pythagoras! Its sides are 756 feet long (about 3 city blocks), and it is 481 feet tall (as tall as a 48-story building). It took 80,000 people working non-stop for 10 years to build it. 4500 years later and it's still standing strong. And they couldn't have done it without knowing and using the fact that in a right triangle, $a^2 + b^2 = c^2$!