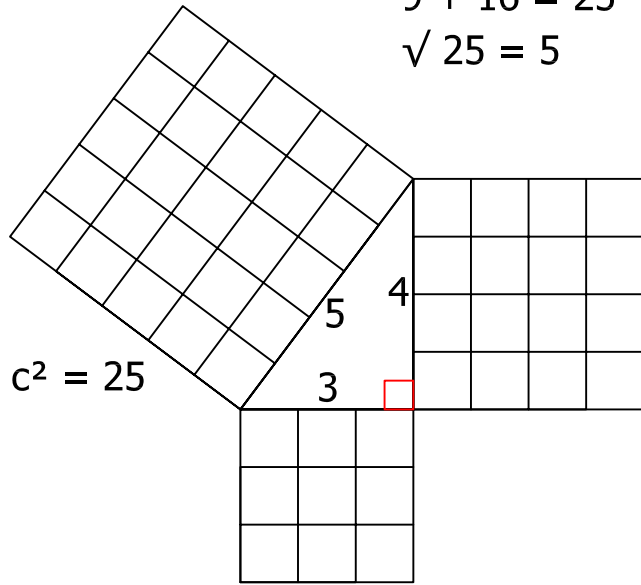Euclid's Elements Book 1 Prop 47
In right-angled triangles the square on the side opposite
the right angle equals the sum of the squares on the sides
containing the right angle.

$a^2 + b^2 = c^2$
$9 + 16 = 25$
$\sqrt{25} = 5$

3:4:5
6:8:10
12:16:20
24:32:40

$b^2 = 16$

$c^2 = 25$

$a^2 = 9$

c

b

a

5

4

3