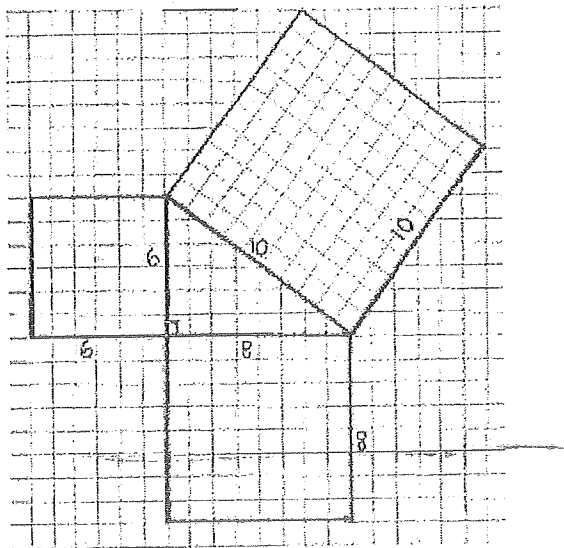


Use the diagrams to answer the following questions.



What are the lengths of the legs of the right triangle?

_____ and _____

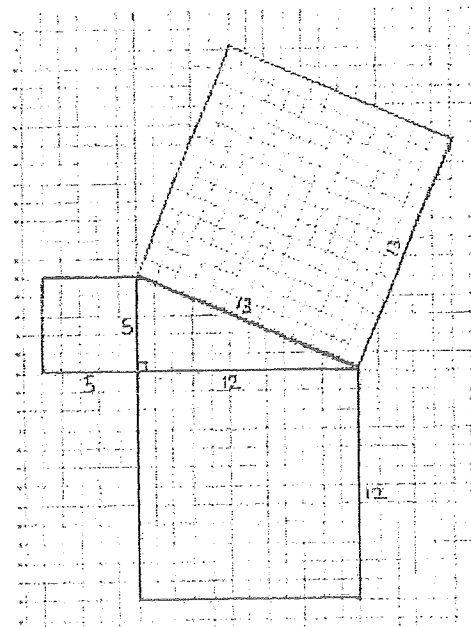
What is the length of the hypotenuse?

What are the areas of the squares off of the legs?

_____ and _____

What is the sum of those two areas?

What is the area of the square off of the hypotenuse?



What are the lengths of the legs of the right triangle?

_____ and _____

What is the length of the hypotenuse?

What are the areas of the squares off of the legs?

_____ and _____

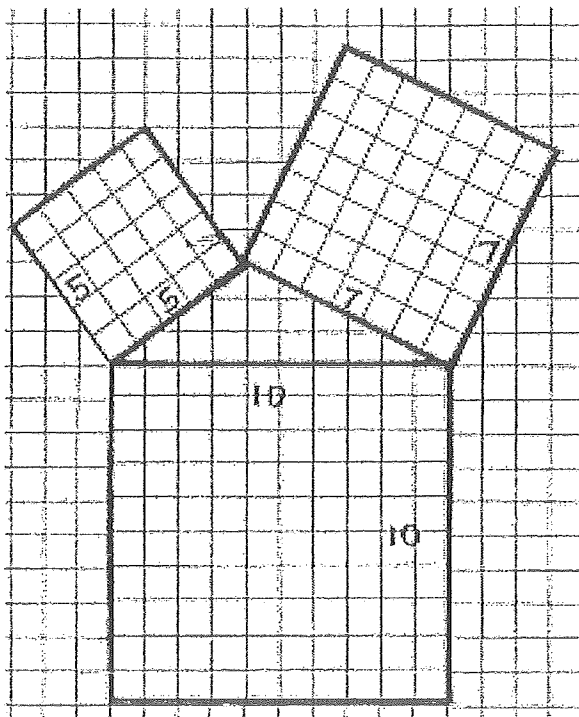
What is the sum of those two areas?

What is the area of the square off of the hypotenuse?

Compare:

- The area of the square off the hypotenuse
- The sum of the areas of the squares off the legs

What do you notice? _____



What are the lengths of the shorter sides of the triangle? _____ and _____

What is the length of the longest side? _____

What are the areas of the squares off of the two shorter sides? _____ and _____

What is the sum of those two areas? _____

What is the area of the square off of the longest side? _____

If there is no relationship, why do you think that is? _____

Challenge: The data below was taken from five right triangles with sides a , b , and c . The square off each side is denoted with a capital letter. Using what you have discovered, complete the table.

a	Area of A	b	Area of B	Area of C	c
6		8			
5		4			
9		10			
	1		4		
	9			36	