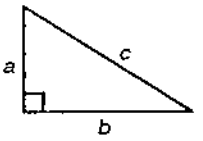
Name _____ Date _____

lab 8.3A

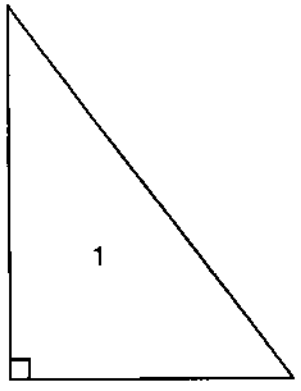
Materials: Pencil, Ruler

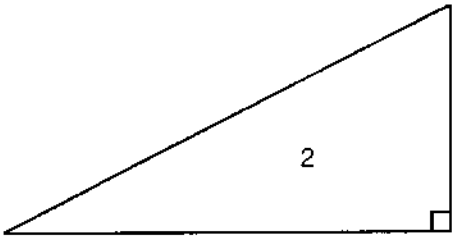
1. For each of the right triangles below, label the legs a and b, and label the hypotenuse c, as shown at the right.

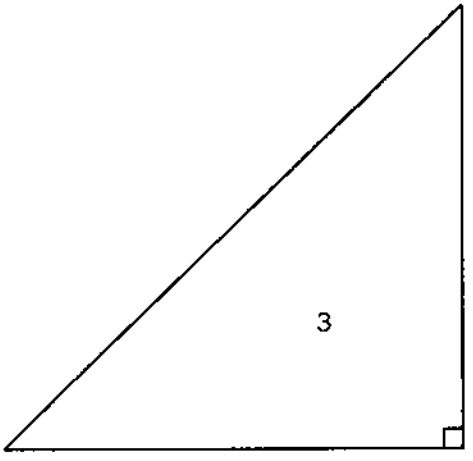


2. Measure the lengths of the legs of each triangle, and calculate the sum of the squares of the legs. Record your results in the table.

3. Measure the hypotenuse of each triangle and calculate the square, c^2. Record your results in the table. Compare the sum of the squares of the legs, $a^2 + b^2$, with the square of the hypotenuse, c^2.







Right Triangle 1		Right Triangle 2		Right Triangle 3	
a		a		a	
b		b		b	
$a^2 + b^2$		$a^2 + b^2$		$a^2 + b^2$	
c		c		c	
c^2		c^2		c^2	

What relationship do you find between the sum of the square of the legs, $a^2 + b^2$, and the square of the hypotenuse, c^2?

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