Date:

Activity: "26 Squares"

Getting Started
With the squares from your envelope
i)
ii)
iii)

Date:

Examples of 'Empty' Triangles

- -Randomly pick out three and try to make a triangle.
- -Do this several times and list your 'triplets' in the table, accordingly.

Triangle	Non-triangle

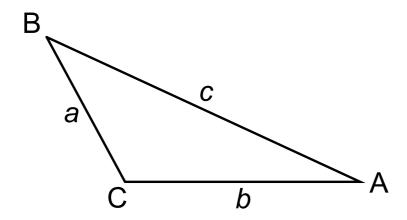
Triangle Side Inequality
Based on your observations, what have you noticed about the side lengths required to make a triangle? Explain.

Date:						

Triangle Side Inequality

Key Idea:

To construct any triangle, ABC, using the squares you've been given ...



What's Your Angle?

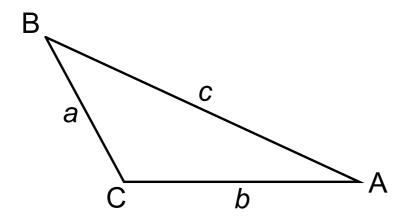
- -Go back to your **Triangle** list.
- -Measure the angles for, at least, three of your triangles and record them in the table.

Triangle	Side	leng	ths	Angle Measures A B C			
- Inangic	а	b	С	Α	В	С	
						 	

Triangle Side & Angle Inequality

Key Idea:

If c > b > a, then ...



Right Triangles

- -Find 3 squares that make a right triangle.
- -Find as many possible combinations as you can with the squares you've been given.
- -Add your data to the class table and to your own (next slide).

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Right Triangles

side 1	side 2	side 3	(side 1) ²	(side 2) ²	(side 3) ²

Sum of the Squares

What do you notice about the squares of the sides? (side 1)2 (side 2)2 (side 3)2

Pull

Date: _____

Sum of the Squares

The Sum of the Squares (also known as the Pythagorean Theorem) tells us that ...

-the sum of the areas of the two, smaller squares (a^2 and b^2) equals the area of the larger square (c^2)

OR

$$c^2 = a^2 + b^2$$

Problem

The length of one side of a right triangle is 10 cm. What might the lengths of the other two sides be?

Show your work.

Date: _____

Activity: "26 Squares" Learning Goals

Practice

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p371 Sum of Squares (Pythagorean Theorem)
#3, 4
p370 Ratio & Proportion
#2 acd
p370 Key Terms (Review of)
#1
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Date: