

# PYTHAGOREAN INVESTIGATION

(name)

Complete the table. Answer the questions.

- 1. Assemble sets of three squares. The corners should touch with no gaps or overlap.
- 2. What shape is formed inside the squares?
- 3. Calculate the area of all three squares.
- 4. Record this information in your chart.

SET	SMALL AREA	SMALL AREA	SUM	LARGE AREA	TRIANGLE
1	4 x 4 = 16	6 x 6 = 36	5 2	8 x 8 = 64	
2					
3					
4					
5					
6					
7					
8					
9					
1 0					
1 1					
1 2					
1 3					
1 4					

- 5. Which sets of squares will form acute triangles?
- 6. Which sets of squares will form obtuse triangles?
- 7. Which sets of squares will form right triangles?

PYTHAGOREAN INVESTIGATION

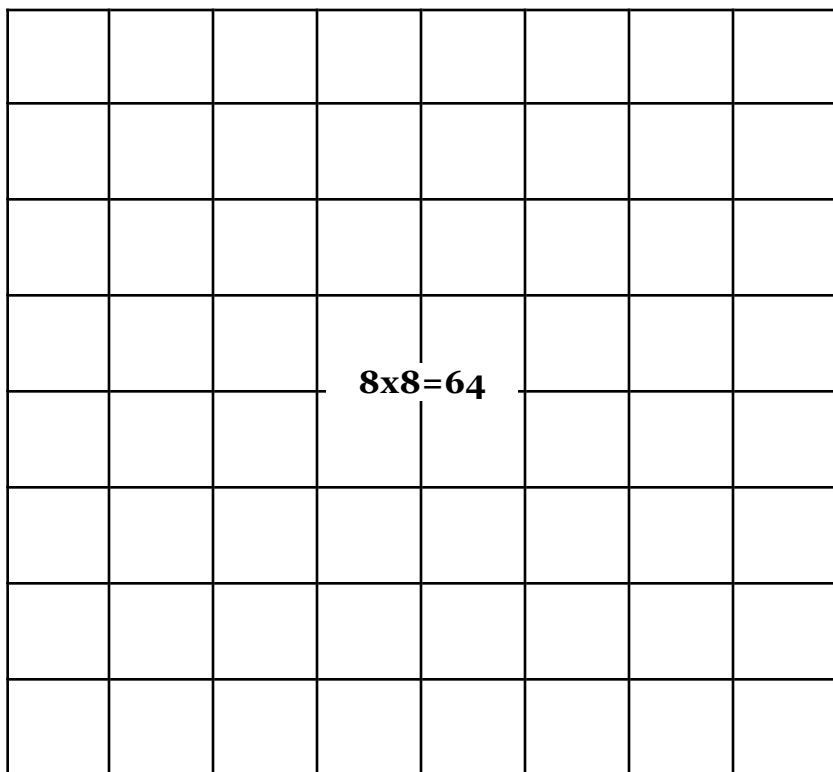
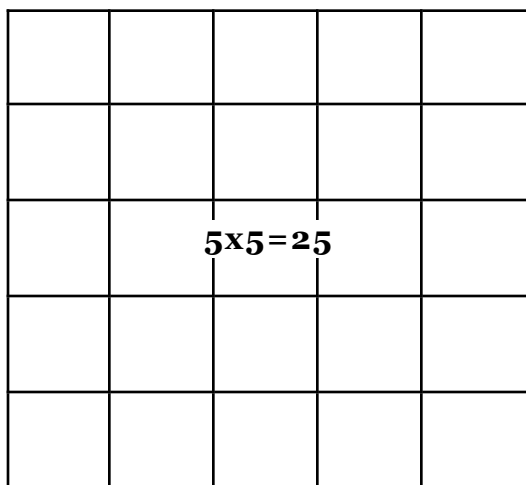
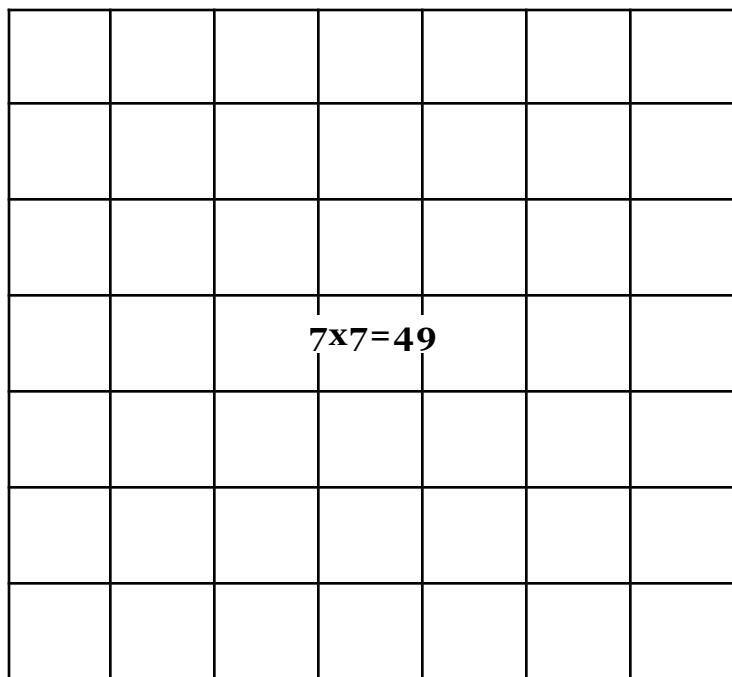
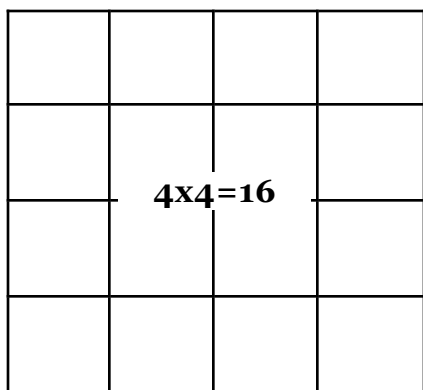
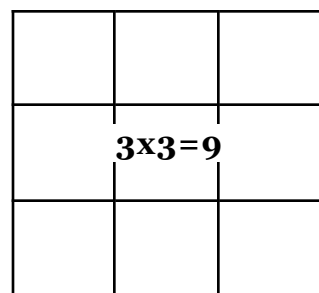
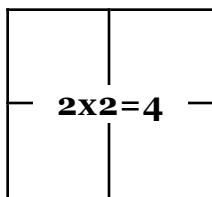
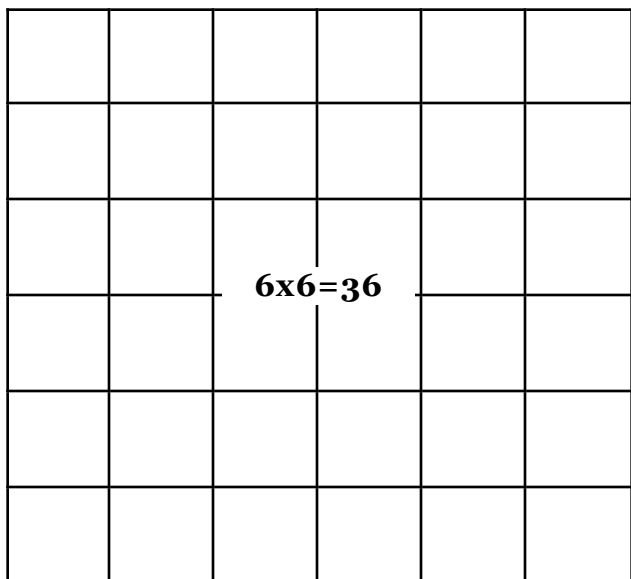
(name)

Complete the table. Answer the questions.

8. Predict whether these triangles will be acute, obtuse, or right.

SET	SMALL SIDE	SMALL SIDE	SUM	LARGE SIDE	TRIANGLE
15	5	12		13	
16	5	13		14	
17	2	5		6	
18	3	4		5	
19	2	7		9	
20	3	13		15	
21	9	10		14	
22	6	7		10	
23	6	8		10	
24	6	9		10	
25	7	12		13	

**1**



			9x9=81					

A 10x10 grid of squares. In the center of the grid, the text "10x10=100" is written in a bold, black, sans-serif font. The text is positioned such that it spans across the middle rows and columns of the grid.