What relationship, if any exists, between the areas of the squares drawn off the sides of acute, right and obtuse triangles?

What do you notice?

- I saw that for the obtuse, they seem similar in size and normal "a" is ½ of "b" and "c" was different.

- It seems the obtuse triangle squares loosely follow the pattern a x 2 = b and b x 2.5 = c

- The obtuse triangles have a big side and 2 smaller sides. The big side could be 2 times the size of the other or one other. This is my claim.

- Two of the same "c" square for obtuse triangles don't necessarily have the same "a" and "b" squares.

- If you add a +b, they equal c because one angle is 90 degrees

a + b > c because as the angle gets smaller so does the c side length
a + b < c because as the angle gets larger so does the c side length

- I noticed that the smaller angles have areas that are close.

- I noticed that for obtuse triangles, a + b added together were always less than c and for acute a + b were always more than c

RIGHT

- I think that there is a pattern where a + b of a right triangle = c

- I noticed in all cases the a + b lengths equal that longest number in right triangles

a	b	c
1 sq. unit	1 sq. unit	2 sq. unit
9 sq. unit	9 sq. unit	18 sq. unit

- I noticed that with the right triangle, the "a" square plus "b" square equals the "c" square.

Example:	a square	b square	c square
	4	36	40

4 + 36 = 40

- I noticed that for right triangles if a square "a" and "b" were the same, added together they would make "c". I noticed that a + b = c. I think that for right triangles a + b will always equal c.

- I noticed that the side length of a triangle is the square root of the square off of the side length.

The two squares added give you the other side length (right triangle)
Obtuse: a + b < c
Acute: a + b > c
Right: a + b = c

- I noticed that if you add up squares a + b for a right triangle it equals square c.

- I think squares a + b for right triangle will always equal square c for that triangle when added up. I also think this has something to do with the Pythagorean Theorem (a squared + b squared = c squared)

- All of the squares cannot be the same size.

For acute triangles most of the time the b square and the c square are the same.
a squared + b squared = c squared for right triangles

- Most of the right triangles a and b add up to c.

- Square c always has the largest area, but square a and b are sometimes the same, in all types of triangles. The a square plus the b square equals square c for right triangles.

ACUTE

- The acute triangles usually have two squares of equal area.

- Acute: a lot of b and c squares are the same area
  Right: a lot of a and squares are the same area
  Obtuse: all of the sides are different

- Acute: square b and a were the same or close in area
  Right: a squared + b squared = c squared

- Square b and c of acute triangles have the same area or close to the same area by a couple of square units.'

- The acute triangles usually have two squares of the same area.

- The acute triangles have two squares each having an area within 1 square unit of each other.

- Most acute triangles have two sides that are the same or at least close.

- I noticed that in a right triangle, square a plus square b equals square c. The triangles with its largest angle close 90 degrees have square a and b add up to be closer to square c compared to the other triangles.

- I noticed that unless all the sides are the same length on the triangle (equilateral) that the sides will all be different.

- For acute triangles (a + b) – a = c. And most of the triangles b and c are the same length.

- I noticed that all the acute triangles are almost always equilateral or isosceles and the ones who aren’t are 1 or 2 apart.

- Right triangle: the areas of square a and square b will add up to equal the area of square c.
  Obtuse: The areas of squares a and b will be less than the area of square c.
  Acute: a and b combined will be more than c.

- For the acute triangles, most of them have two squares with the same area.

- Acute: Most b and c areas are the same.