

Name _____

Triangle Discovery

For each problem, arrange three squares of the given side lengths to form a triangle. Complete the tables to compare the areas. Then determine the type of triangle (acute, right, or obtuse).

Lengths of Sides		
a	b	c
3	4	5
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		

Lengths of Sides		
a	b	c
5	7	9
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		

Lengths of Sides		
a	b	c
6	8	10
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		

Lengths of Sides		
a	b	c
5	8	10
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		

Lengths of Sides		
a	b	c
3	5	7
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		

Lengths of Sides		
a	b	c
5	12	13
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		

Lengths of Sides		
a	b	c
7	9	10
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		

Lengths of Sides		
a	b	c
4	5	6
$a^2 + b^2$		c^2
Compare $a^2 + b^2$ and c^2 using $>$, $<$, or $=$.		
$a^2 + b^2$ _____ c^2		
Type of triangle: _____		