Pythagorean Inequality Theorem

Name _____

Score _____

TI:15

Let a, b, and c are the sides of the triangle. c is the longest side of the triangle. Complete the table.

a	b	c	a^2	b^2	$a^2 + b^2$	c^2	$a^2 + b^2 > c^2$ $a^2 + b^2 < c^2$ $a^2 + b^2 = c^2$	Acute/Obtuse/Right Triangle
20 yd	21 yd	29 yd						
7 in	8 in	9 in						
10 ft	11 ft	16 ft						
19 yd	13 yd	22 yd						
12 in	16 in	24 in						
10 ft	24 ft	26 ft						

Pythagorean Inequality Theorem

Name _____

Score _____

Answer key

TI:15

Let a, b, and c are the sides of the triangle. c is the longest side of the triangle. Complete the table.

a	b	c	a^2	b^2	$a^2 + b^2$	c^2	$a^2 + b^2 > c^2$ $a^2 + b^2 < c^2$ $a^2 + b^2 = c^2$	Acute/Obtuse/Right Triangle
20 yd	21 yd	29 yd	**400**	**441**	**841**	**841**	**=**	**Right Triangle**
7 in	8 in	9 in	**49**	**64**	**113**	**81**	**>**	**Acute Triangle**
10 ft	11 ft	16 ft	**100**	**121**	**221**	**256**	**<**	**Obtuse Triangle**
19 yd	13 yd	22 yd	**361**	**169**	**530**	**484**	**>**	**Acute Triangle**
12 in	16 in	24 in	**144**	**256**	**400**	**576**	**<**	**Obtuse Triangle**
10 ft	24 ft	26 ft	**100**	**576**	**676**	**676**	**=**	**Right Triangle**