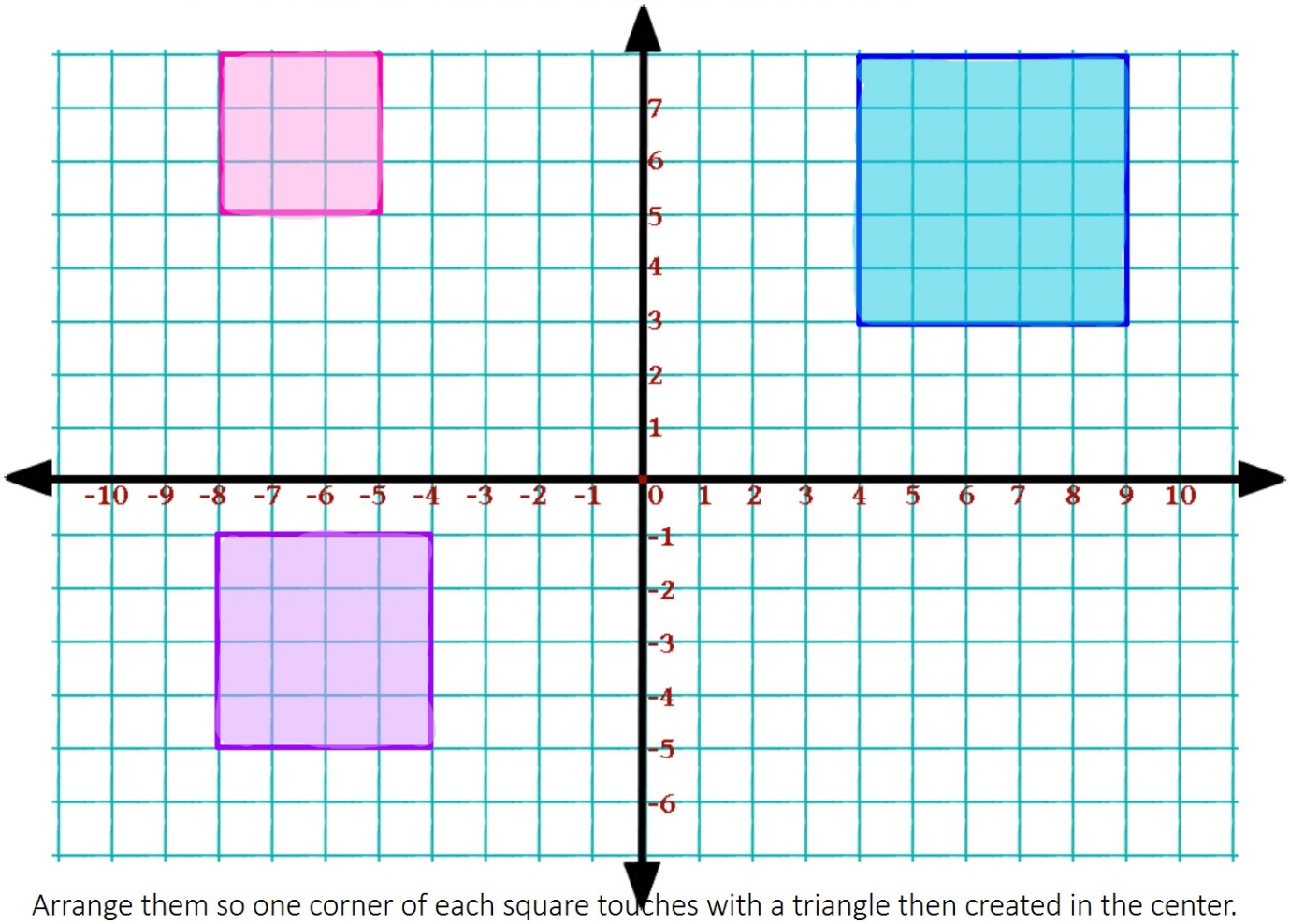
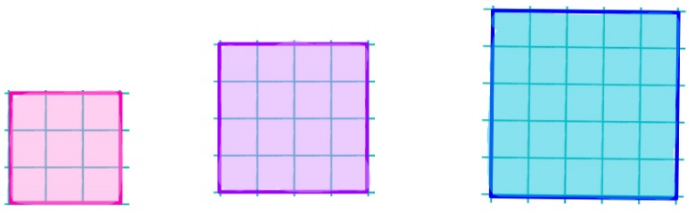
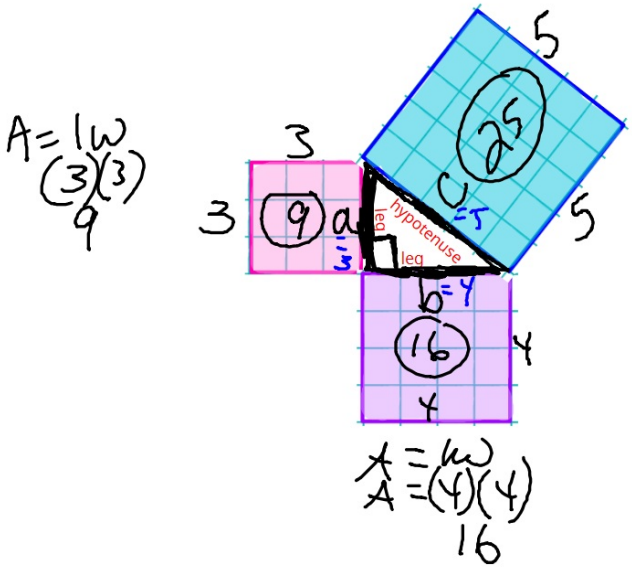
Color and cut out 3 squares (3 by 3), (4 by 4), and (5 by 5)



Arrange them so one corner of each square touches with a triangle then created in the center.



Pythagorean Theorem Proof



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

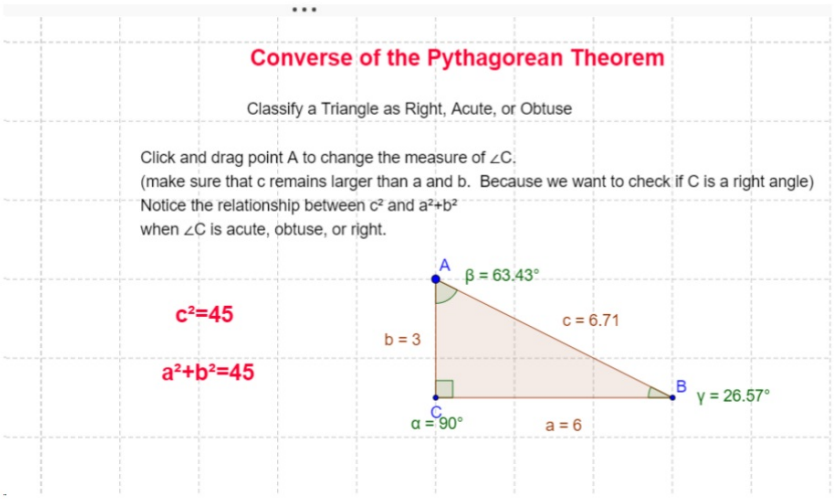
$3^2 + 4^2 = 5^2$

$9 + 16 = 25$

$25 = 25$ ✓

Click Link Below for Converse of the Pythagorean Theorem Investigation

https://www.geogebra.org/m/WpEAMAak



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

$10.44^2 = 6^2 + 5^2$

$109 = 36 + 25$

$109 > 61$

obtuse

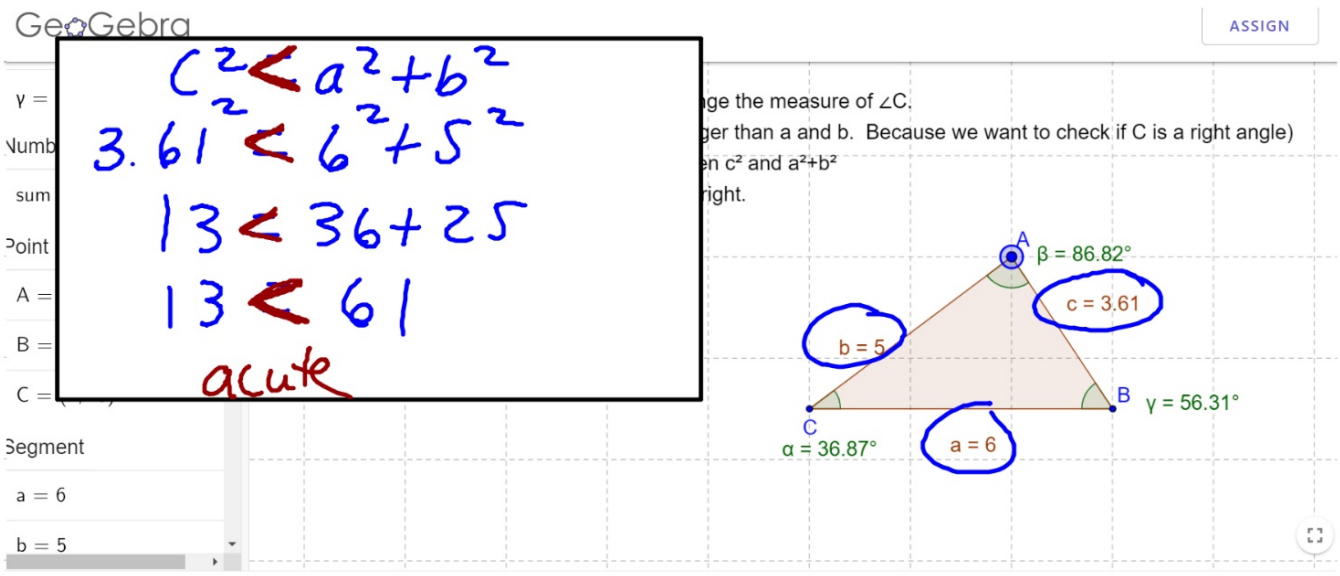
ASSIGN

t A to change the measure of ∠C.
emains larger than a and b. Because we want to check if C is a right angle)
hip between c^2 and a^2+b^2
obtuse, or right.

Segment

a = 6

b = 5


GeoGebra
ASSIGN
γ =
Numb
sum
Point
A =
B =
C =
Segment
a = 6
b = 5
ge the measure of ∠C.
ger than a and b. Because we want to check if C is a right angle)
en c² and a²+b²
right.
A
β = 86.82°
c = 3.61
b = 5
B
γ = 56.31°
C
α = 36.87°
a = 6
C² < a² + b²
3.61² < 6² + 5²
13 < 36 + 25
13 < 61
acute

How can you use the Pythagorean Theorem formula to determine if a triangle is acute, obtuse, or right?

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

$c^2 < a^2 + b^2$ acute

$c^2 > a^2 + b^2$ obtuse