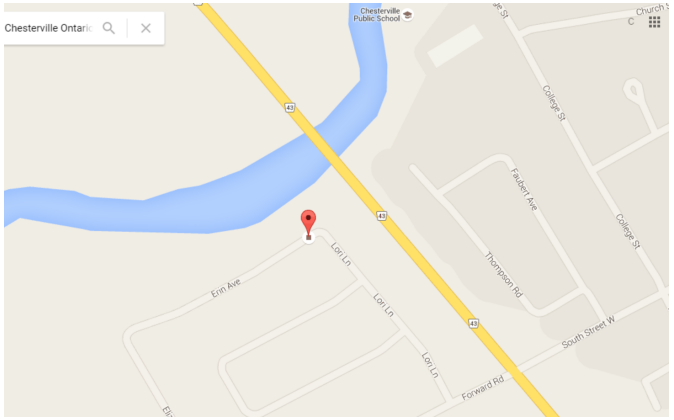
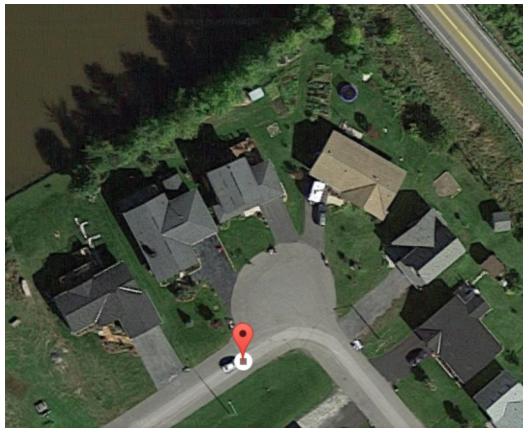
Sum of Square

Learning Goal

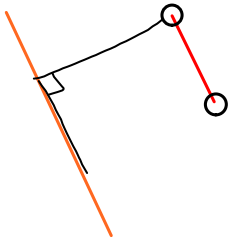
Google Maps



Google Earth

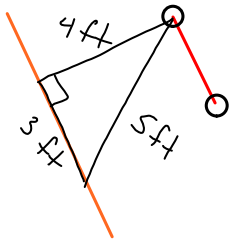


Google Earth



Sum of Squares

Notice that ...



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

$9 + 16 = 25$

$25 = 25$

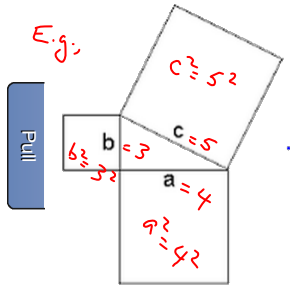
Sum of the Squares

The *Sum of the Squares* (also known as the *Pythagorean Theorem*) tells us that ...

-the sum of the areas of the two, smaller squares (a^2 and b^2) equals the area of the larger square (c^2)

OR

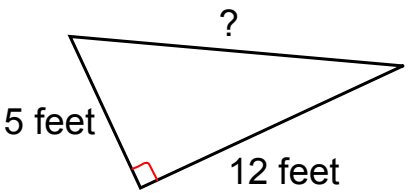
$c^2 = a^2 + b^2$



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

Pull

Try this ...



Use the Sum of Squares (Pythagorean Theorem) to solve for the missing side length.

Problem

a) The length of one side of a right triangle is 10 cm. What might the lengths of the other two sides be?

Show your work.

(HEY! Can you come up with two ways to do this problem?)

b) If you haven't done so already, find a case where the missing lengths are whole numbers only...no decimals!

Practice

MBF 3C

p4 #2ac, 1ace, 3, 6ab

MAP 4C

p72 #4, 10bc, 9ab