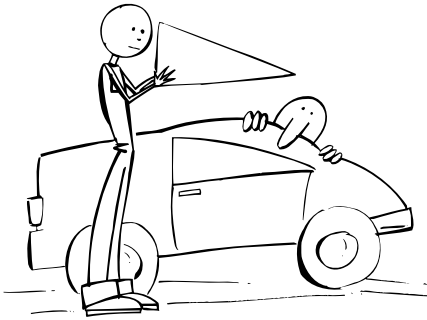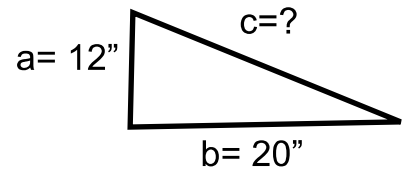# MATH

Plane and Simple
Minding a Business

TRIANGLE TANGLE

Plane and Simple are installing the side windows on their car. They want to put a rain guard on it. They need to know how long the piece of rain guard will be. They know it will be equal to the length of the longest side of the triangle shaped window. This side is known as the hypotenuse. They have the measurements for the other 2 shorter sides. Help them find the length of the missing side.

a= 12"   c=?

b= 20"

Round your answer to the nearest tenth.

Directions: Use the diagram to help you solve the problem. Find the length of the unknown side. Explain all the steps you took to solve the problem and the mathematic concepts used to solve the problem.

Step1: Recall the Pythagorean Formula.

$$\sqrt{a^2 + b^2} = c$$

Step 2: Find the square of side a.

Step 3: Write a sentence to explain what you did to find the square of side a.

Step 4: Find the square of side b.

Step 5: Write a sentence to explain what you did to find the square of side b.

Step 6: Find the sum of the squares of side a and side b.

Step 7: Find the square root of the sum of the squares of side a and side b. This is length of the rain guard.

Step 8: Write a sentence explaining what you did in steps 6 and 7 and clearly state you answer.

skills used

applying the Pythagorean formula to a problem, operations with variables, order of operation, and computation