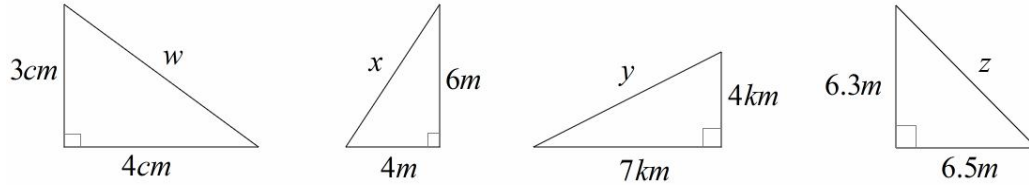**Pythagoras Theorem** – www.m4ths.com

Give all answers to 1 decimal place where appropriate.
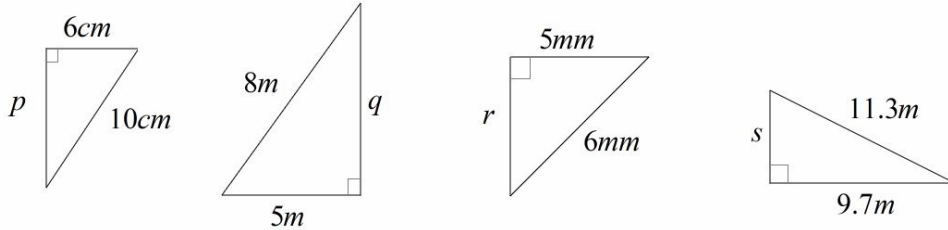
Task 1 - Finding a the Hypotenuse in a Right Angled Triangle (longest side)

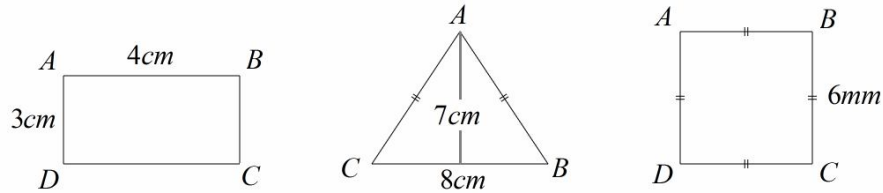Find the value of w, x, y and z in the diagrams below.

3cm w 4cm x 6m 4m y 4km 7km   6.3m z 6.5m

Task 2 - Finding a Shorter Side in a Right Angled Triangle

Find the length of p, q, r and s in the triangles below.

6cm p 10cm   8m q 5m   5mm r 6mm   11.3m s 9.7m

Task 3 – Using Pythagoras Theorem

Use Pythagoras Theorem in each case to find the length AC.

A 4cm B 3cm D C   A 7cm C 8cm B   A B 6mm D C

Task 4 – Using Pythagoras Theorem

(1) Bob stands at a point facing north. He walks forward 4.8km before turning left and heading west for 7.2km. How far away from his starting point is he when he was completed the 7.2km?

(2) The playing area of a snooker table measures 11 feet 8.5 inches by 5 ft 10 inches. Find the furthest distance any two pockets can be from each other.

Task 5 – Using Pythagoras Theorem

Find the ratio of the area of the grey square to the area of the triangle in its simplest form:

13m 5m