Use a scientific calculator and this formula

$$
\text { mystery }=\sqrt{\text { longest }^{2}-\text { shorter }^{2}}
$$

1. (a) Here is a right angled triangle ABC.

$\mathrm{BC}=8 \mathrm{~cm}$
$\mathrm{AC}=10 \mathrm{~cm}$
Work out the length of $A B$.
$\qquad$
Measure the lengths of all three sides to check your workings.
(b) Here is a right angled triangle.


5 cm
$\mathrm{AB}=12 \mathrm{~cm}$
$\mathrm{BC}=5 \mathrm{~cm}$
Work out the length of AC.
Give your answer correct to 1 decimal place.

Measure the lengths of all three sides to check your workings.
Turn over for more questions and answers.
2. Here is a right angled triangle.
$\mathrm{BC}=17 \mathrm{~cm}$

$18.3 \ldots \mathrm{~cm}$
3. In triangle ABC
$\mathrm{AC}=125 \mathrm{~km}$
$\mathrm{BC}=35 \mathrm{~km}$
angle $\mathrm{ABC}=90^{\circ}$
Work out the length of $A B$.

km
4. The diagram shows a ladder AB resting against a wall BC .

The distance AC is 2 m
The length of the ladder AB is 5 m
Calculate the height BC.
Give your answer correct to 1 decimal place.

m
Answers 1a) 6
b) 10.9
2) 18.3
3) 120
4) 4.6

