## Pythagoras' Theorem Solving Problems

1 The top of a kitchen table measures 160 cm by 90 cm . An ant walks diagonally across the table. How far does the ant walk correct to the nearest cm ?

2 How high up a wall can a 20 m ladder reach when it is placed 2 m from the foot of a wall? Give your answer correct to 1 decimal place.

3 A rectangular garden bed measures 3.7 m by 50 cm . Find the length of the diagonal in cm ?
4 A road sign is in the shape of an equilateral triangle with sides 600 mm . Find the area of the sign correct to the nearest $\mathrm{cm}^{2}$

5 Calculate x in the figure below correct to 1 decimal place.


6 Find the perimeter of the shape below to 1 decimal place


7 Find the value of $x$


17 m

Answers
$1 \quad 183 \mathrm{~cm}$
219.9 m
$3 \quad 373 \mathrm{~cm}$
$4 \quad 1558 \mathrm{~cm}^{2}$
$5 \quad 12.7$
$6 \quad 64.8$
713 m

