## National 4 <br> Homework Exercise 18 <br> Pythagoras Theorem

1. Complete all calculations below without a calculator. Show all working!
(a) $3 \times 18.43$
(b) $33.66 \div 3000$
(c) $60 \%$ of 30 kg
2. Calculate lengths $a, \mathrm{~b}$ and c , correct to 1 decimal place.

3. (a) Draw a coordinate diagram. Plot the 2 points $A(2,8)$ and $B(6,1)$.
(b) By creating a right-angled triangle calculate the length of AB .
4. A ramp on a mountain bike looks like this:-


How long is the ramp?
5. A garden centre sells hedgehog shelters like the one shown.


Calculate the height of the shelter.
6. The diagram shows a lean to shed.

Calculate the length of the sloping roof.


