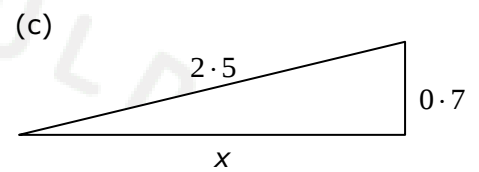
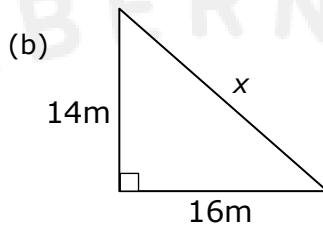
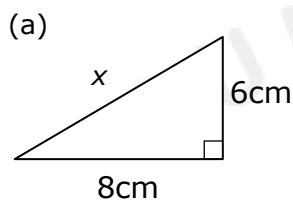


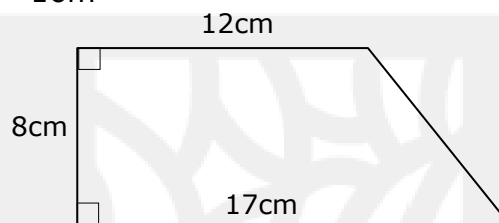
**Calculators are permitted but working must be shown.**

**Essential knowledge:**

1. Calculate the length of the side marked  $x$  in each triangle below:

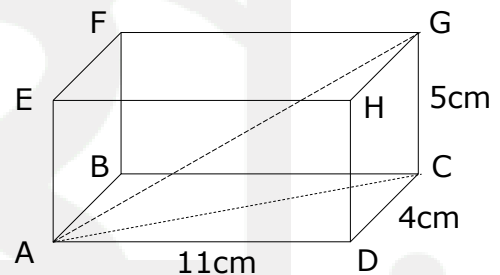


2. Find the length of the missing side in this trapezium?

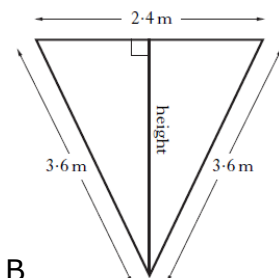


**Unit level:**

3. (a) Calculate the length of the diagonal AC.  
(b) Calculate the length of the space diagonal AG.



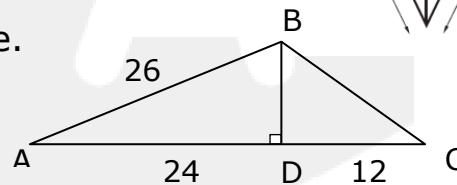
4. The dimensions of an isosceles triangle are shown. Calculate the height of the triangle.



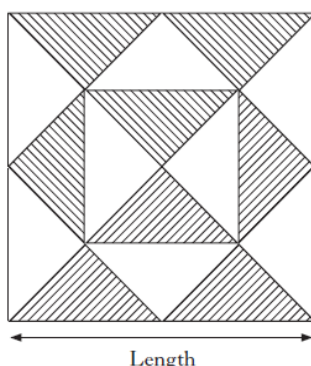
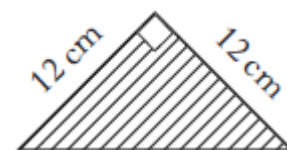
**Assessment level:**

5. Consider the framework opposite.

Calculate the length of BC.



6. Jo is making a patchwork cushion. Each patch is a right-angled triangle with both short sides 12 centimetres



She makes the cushion by arranging the patches as shown.

Calculate the length of the cushion.