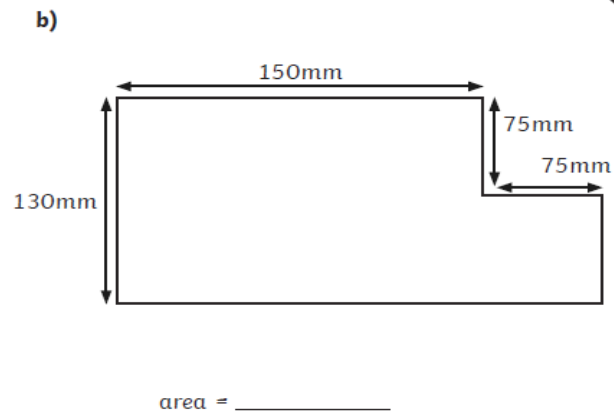
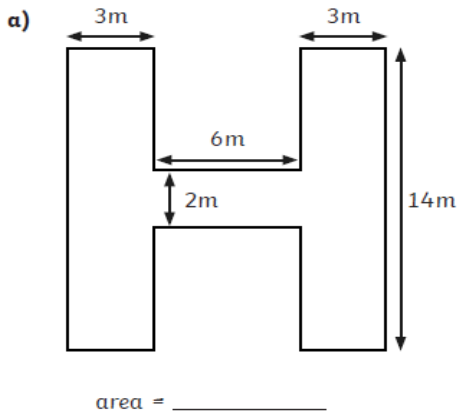
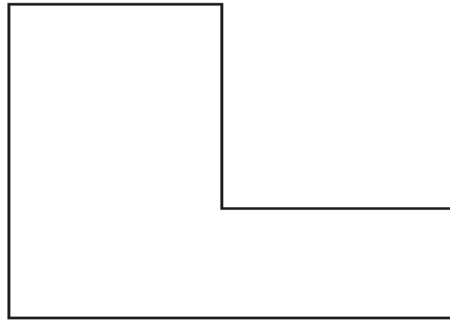


1) Find the area of the following shapes.



2) Use a ruler to draw on the ways you could split this shape to work out its area.



1) Draw 3 different compound shapes, each with an area of 45cm^2 .

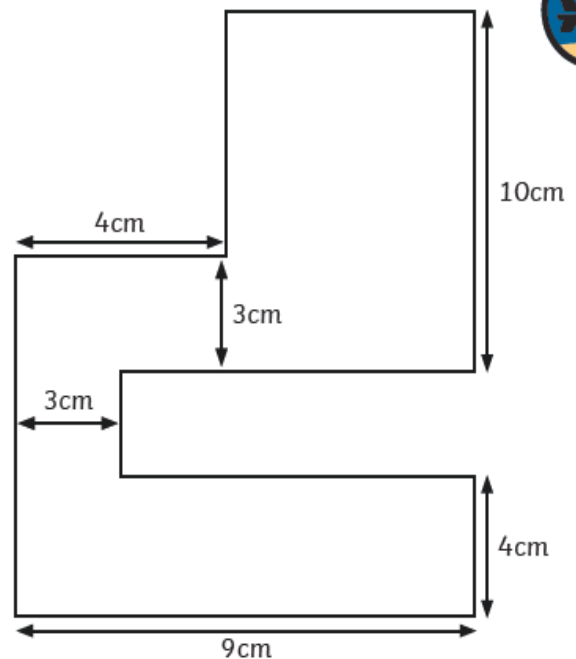
1) Ianto wants to calculate the area of this shape.

a) He says, "It is impossible to work out the area of this shape without more measurements." Is he right?

Prove it!

b) Investigate how many more measurements Ianto needs in order to find the area.

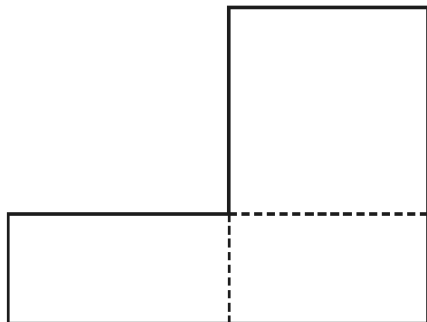
c) If the total area is 107cm^2 , what could the missing lengths be?



- 1) a) 96cm^2
b) $23\,625\text{mm}^2$ or 236.25cm^2



2) Lines drawn as shown:



- 1) a) *Yes. Children should demonstrate that the shape cannot be split into rectangles where every side length is known.*
b) *By splitting the shape into 4 rectangles, children should find that only 2 more measurements are needed in order to make finding the area possible.*
c) *To make an area of 107cm^2 , the sides could measure (clockwise from top right) 10cm , 6cm , 3cm , 6cm , 4cm , 9cm , 10cm , 4cm , 7cm and 5cm .*

