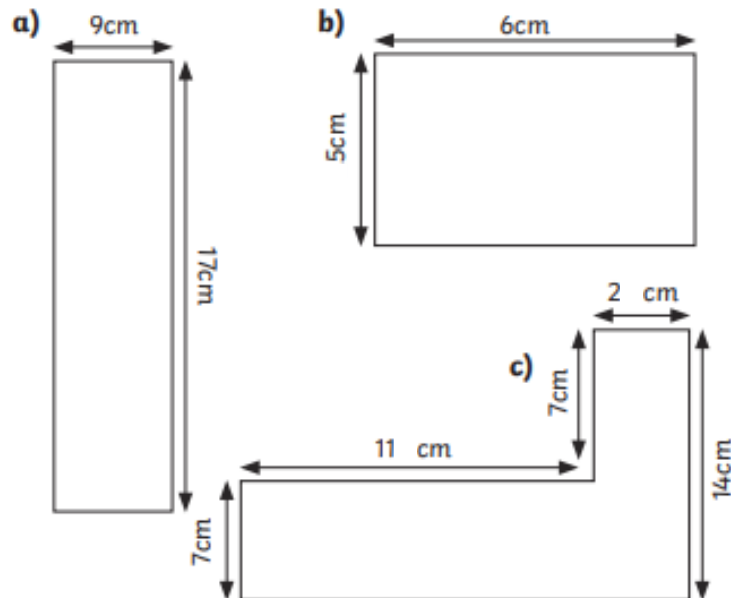


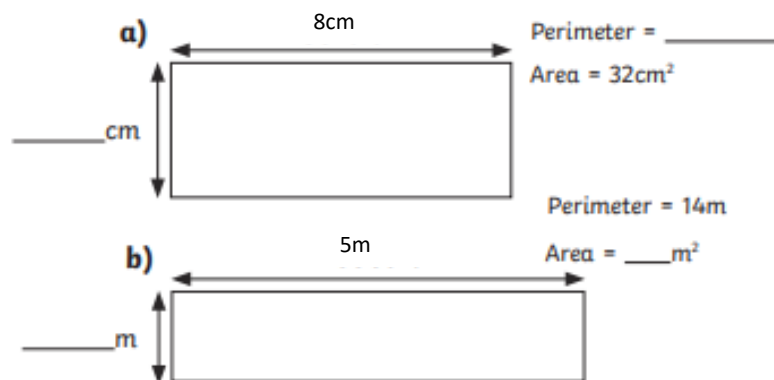
**Area** is the amount of space **inside** a two-dimensional shape. It can be measured in units such as  $\text{cm}^2$  or  $\text{m}^2$

**Perimeter** is the distance **around** a two-dimensional shape. It can be measured in units such as  $\text{cm}$  or  $\text{m}$ .

- 1) Calculate the area and perimeter of the following rectilinear shapes (not to scale).



- 2) Give the missing values for each shape.



- 3) Investigate if Alice's and Oliver's statements are true or false by drawing example shapes for each.



Alice

I can draw two shapes that have an area of  $4\text{cm}^2$  but different perimeters.

Oliver

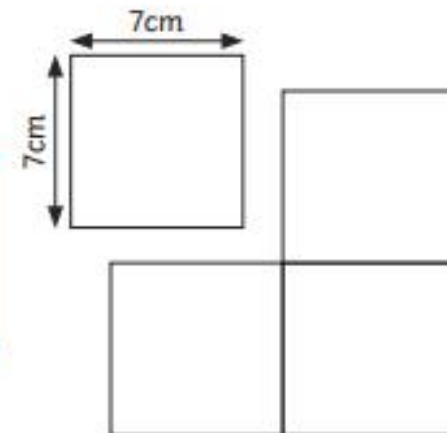
I can draw a shape with the same perimeter and the same area.

- 4) Three of these squares are made into a new shape.



Ben

I think that the new shape has an area and perimeter that is three times that of the original square.



- a) Do you agree with Ben's statement? What mistake do you think he has made?
- b) Give the area and perimeter of the new shape.