

# Area and perimeter

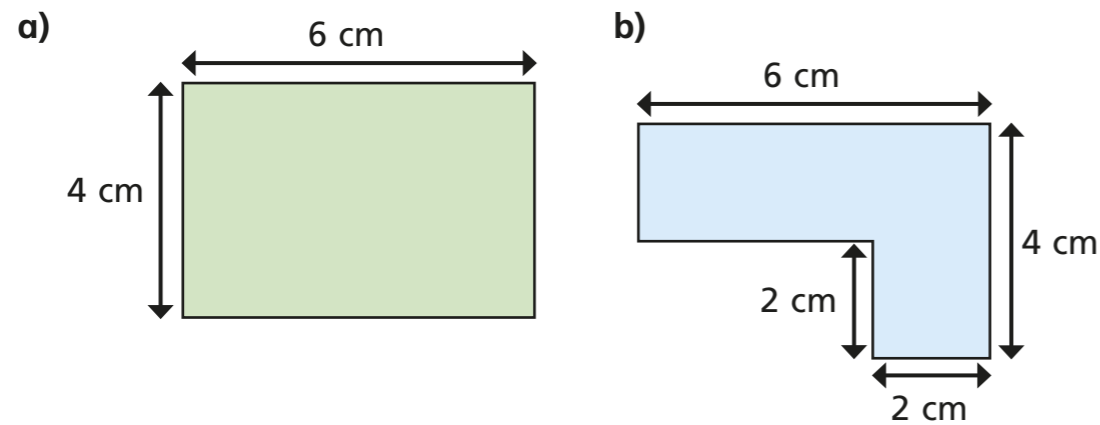
1 Use the words to complete the sentences.

- perimeter     $\text{cm}^2$     cm    m
- area     $\text{m}^2$     inside    around

\_\_\_\_\_ is the amount of space \_\_\_\_\_ a two-dimensional shape. It can be measured in units such as \_\_\_\_\_ or \_\_\_\_\_

\_\_\_\_\_ is the distance \_\_\_\_\_ a two-dimensional shape. It can be measured in units such as \_\_\_\_\_ or \_\_\_\_\_

2 Work out the areas and perimeters of the shapes.



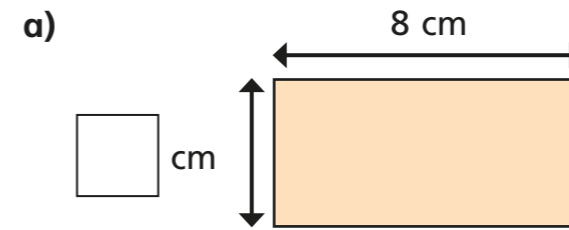
perimeter =  cm

area =   $\text{cm}^2$

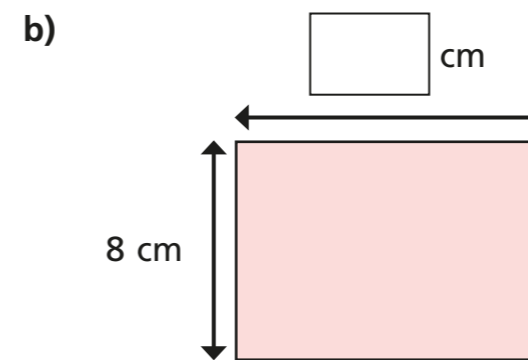
perimeter =  cm

area =   $\text{cm}^2$

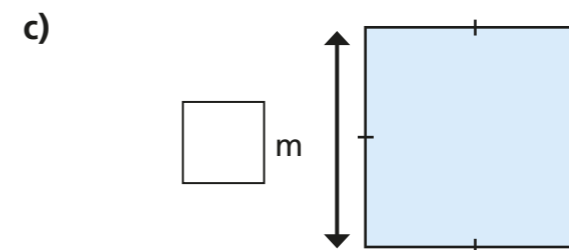
3 Work out the missing values.



area =  $32 \text{ cm}^2$   
perimeter =  cm



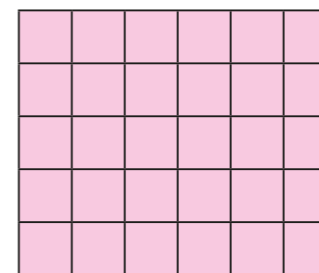
area =   $\text{cm}^2$   
perimeter =  $40 \text{ cm}$



area =   $\text{m}^2$   
perimeter =  $36 \text{ m}$

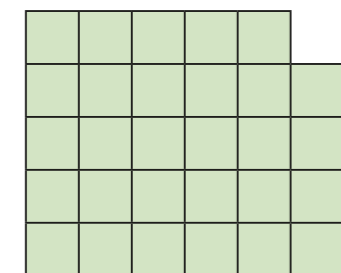
4 Work out the areas and perimeters of the shapes.

Shape A



area =   $\text{cm}^2$   
perimeter =  cm

Shape B



area =   $\text{cm}^2$   
perimeter =  cm

What do you notice?



5



Tommy

If you start with a rectilinear shape, when you increase the area, the perimeter will increase.

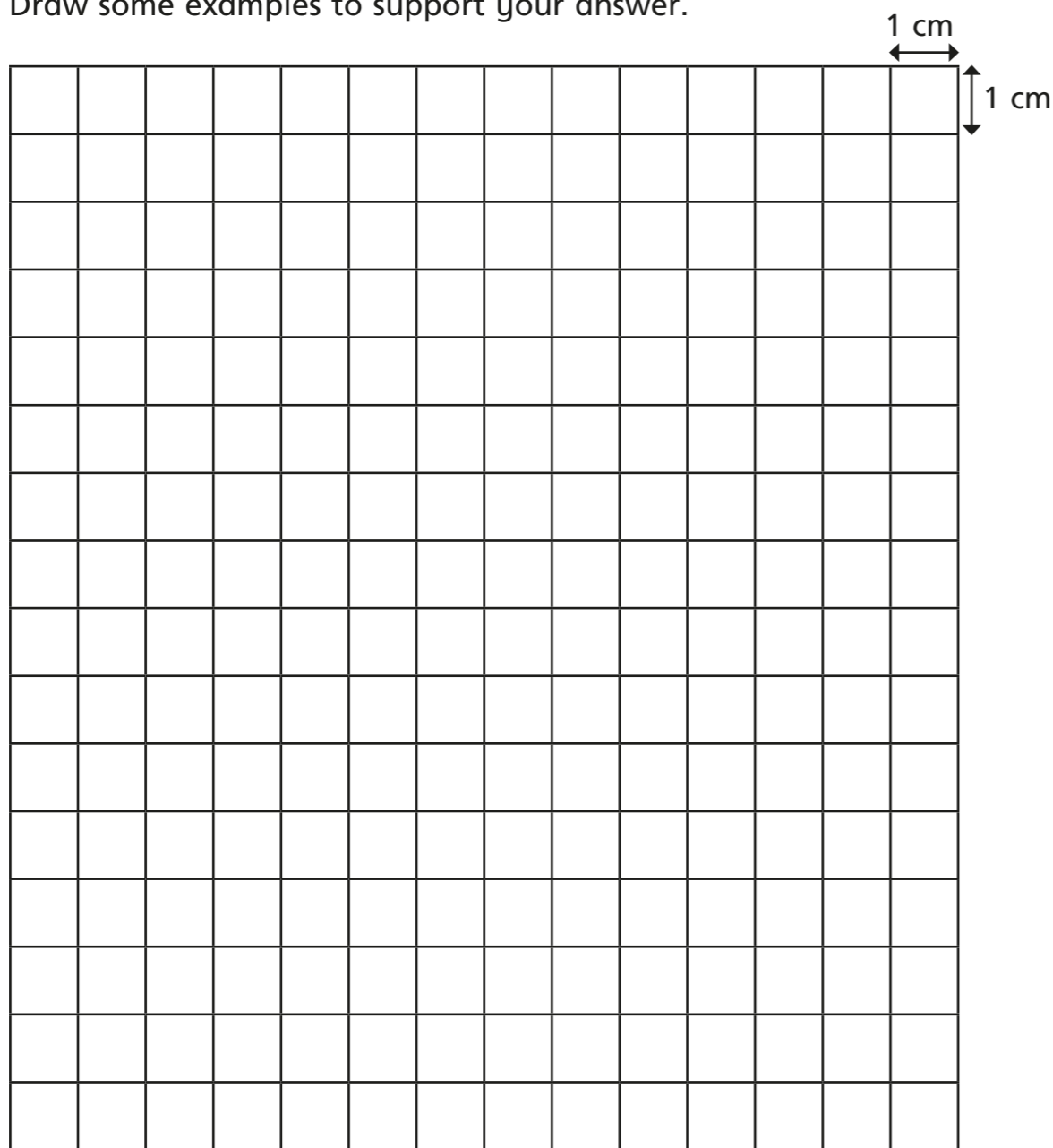
Amir



It depends on the shape.

Who do you agree with? \_\_\_\_\_

Draw some examples to support your answer.

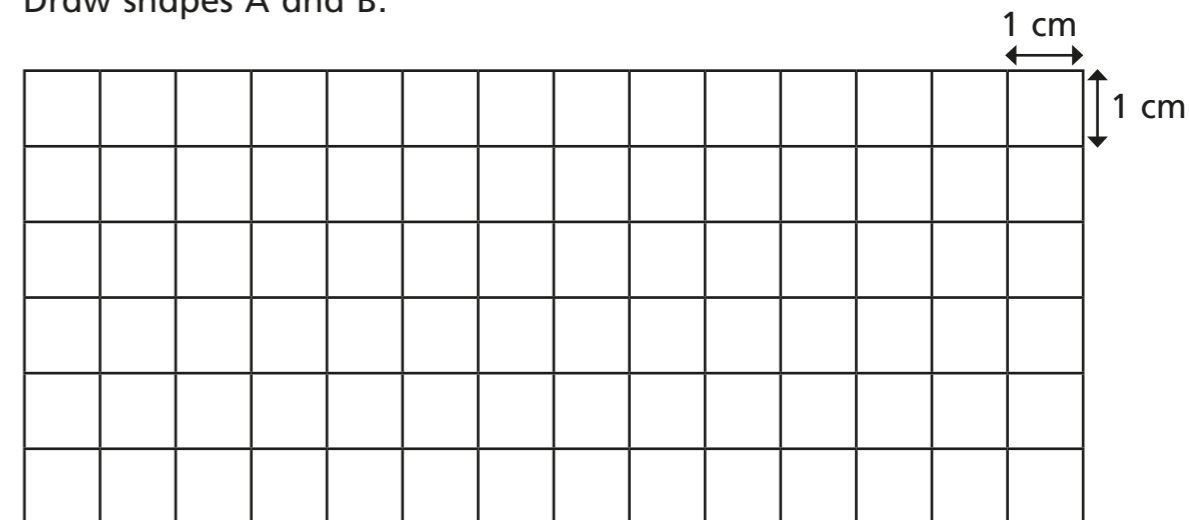


6

Two rectilinear shapes, A and B, each have an area of 12 squares.

- Shape A has the largest perimeter possible.
- Shape B has the smallest perimeter possible.

Draw shapes A and B.



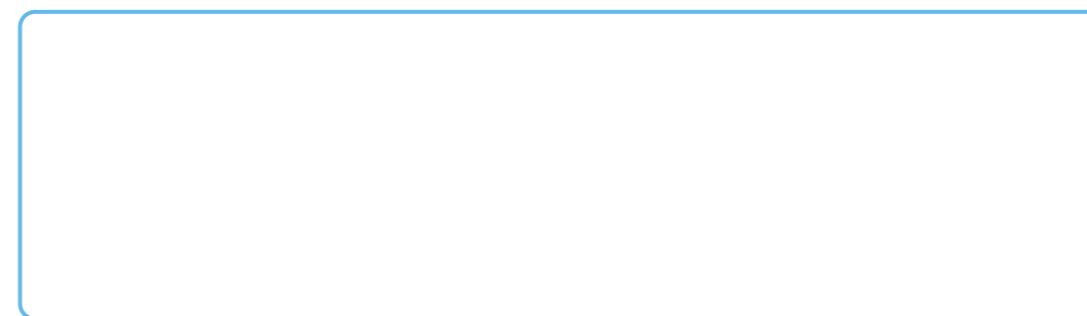
What do you notice?

7

Mr Jones has 50 m of fencing.

He wants to make a rectilinear enclosure using all the fencing.

- a) Draw an example of a shape he could make. Give units on your diagram.



b) What is the greatest possible area of the enclosure?

c) What is the smallest possible area of the enclosure?

