1 Use the words to complete the sentences.

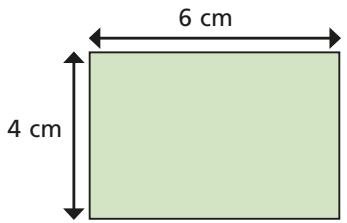
perimeter | cm^2 | cm | m | area | m^2 | inside | around

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

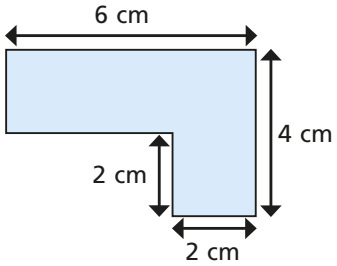
_____ is the distance _____ a two-dimensional shape. It can be measured in units such as _____ or _____

2 Work out the areas and perimeters of the shapes.

a)

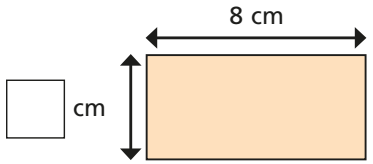


b)



3 Work out the missing values.

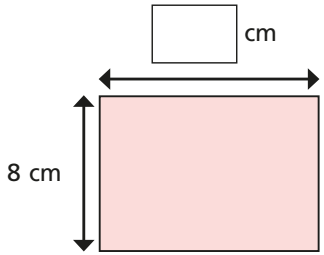
a)



area = 32 cm^2

perimeter = ☐ cm

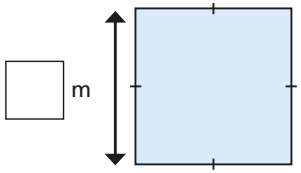
b)



area = ☐ cm^2

perimeter = 40 cm

c)

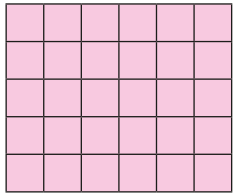


area = ☐ m^2

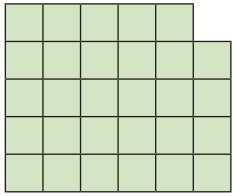
perimeter = 36 m

4 Work out the areas and perimeters of the shapes.

Shape A



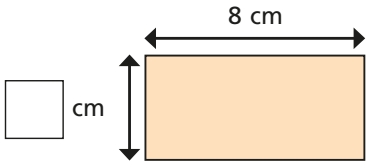
Shape B



What do you notice?

3 Work out the missing values.

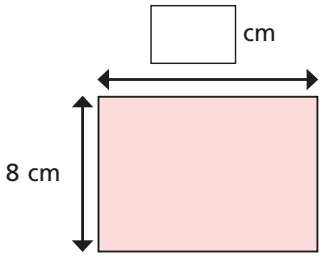
a)



area = 32 cm²

perimeter = ☐ cm

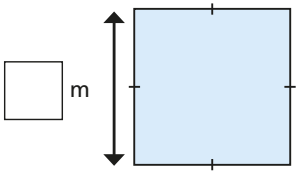
b)



area = ☐ cm²

perimeter = 40 cm

c)

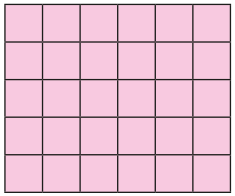


area = ☐ m²

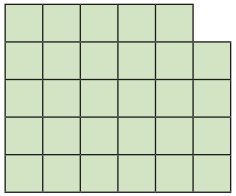
perimeter = 36 m

4 Work out the areas and perimeters of the shapes.

Shape A



Shape B



What do you notice?

5

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

Tommy

It depends on the shape.

Amir

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?