

1.

Use the words to complete the sentences.

perimeter

cm^2

cm

m

area

m^2

inside

around

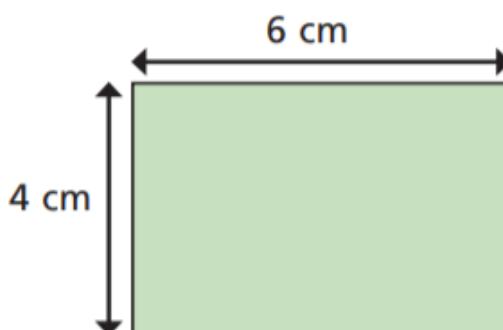
_____ is the amount of space _____ a two-dimensional shape. It can be measured in units such as _____ or _____

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

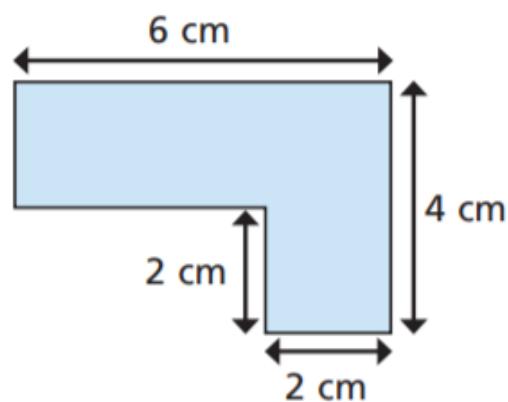
2.

Work out the areas and perimeters of the shapes.

a)



b)



$$\text{perimeter} = \boxed{} \text{ cm}$$

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

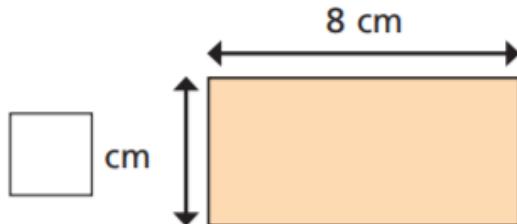
$$\text{perimeter} = \boxed{} \text{ cm}$$

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

3.

Work out the missing values.

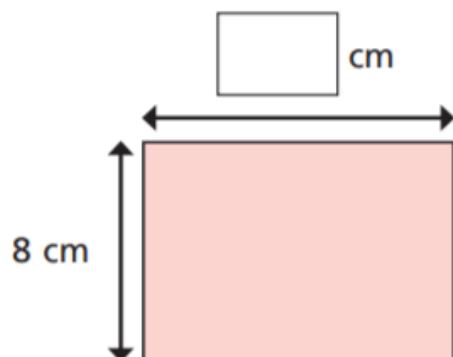
a)



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

$$\text{perimeter} = \boxed{\quad} \text{ cm}$$

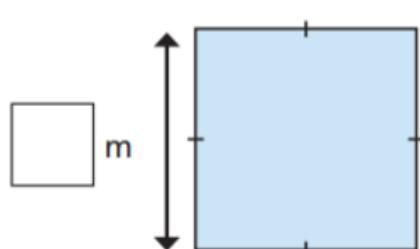
b)



$$\text{area} = \boxed{\quad} \text{ cm}^2$$

$$\text{perimeter} = 40 \text{ cm}$$

c)



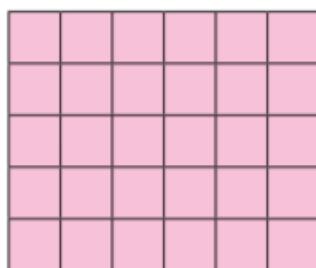
$$\text{area} = \boxed{\quad} \text{ m}^2$$

$$\text{perimeter} = 36 \text{ m}$$

4.

Work out the areas and perimeters of the shapes.

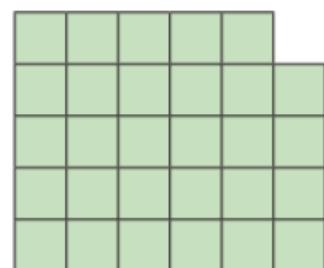
Shape A



$$\text{area} = \boxed{\quad} \text{ cm}^2$$

$$\text{perimeter} = \boxed{\quad} \text{ cm}$$

Shape B



$$\text{area} = \boxed{\quad} \text{ cm}^2$$

$$\text{perimeter} = \boxed{\quad} \text{ cm}$$

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.

7.

Mr Jones has 50 m of fencing.

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

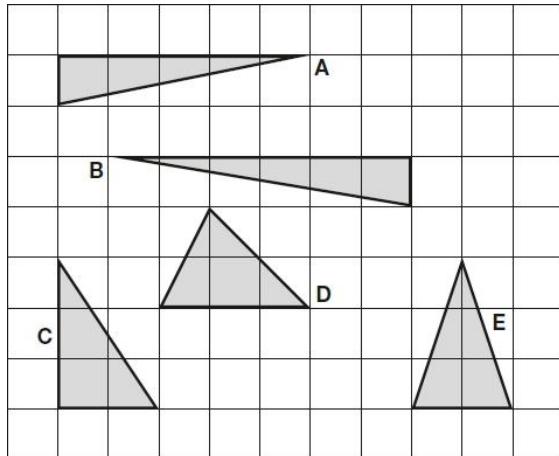
a) Draw an example of a shape he could make. Give units on your diagram.

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

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

8.

Here are five triangles on a square grid.

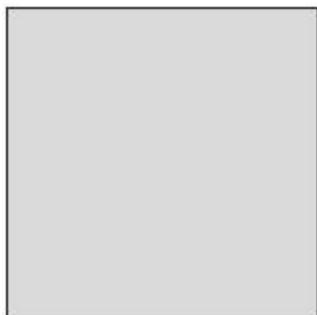


Four of the triangles have the same area.

Which triangle has a **different** area?

9.

The **area** of this square is 36 cm^2 .



Not actual size

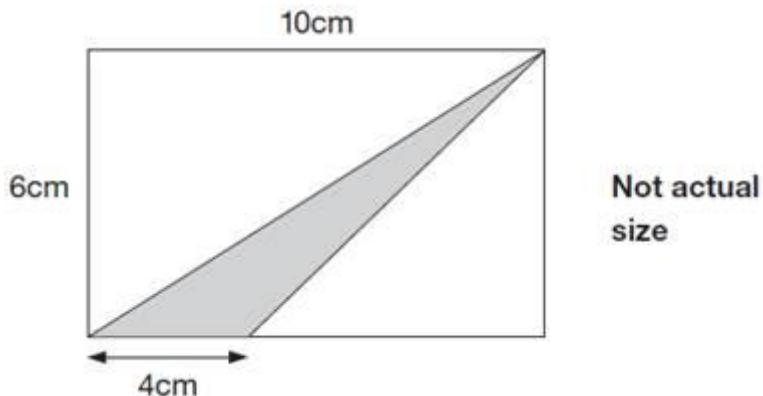
The square is cut into quarters to create 4 identical rectangles.



What is the **perimeter** of **one** of the small rectangles?

10.

The diagram shows a shaded triangle inside a rectangle.

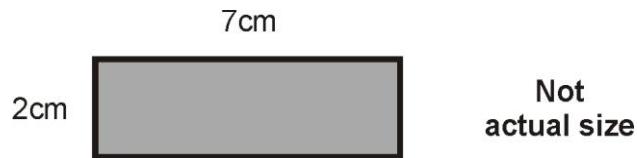


What is the area of the shaded triangle?

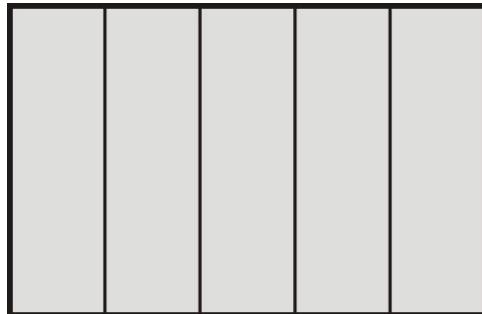
11.

Lara has some identical rectangles.

They are 7 centimetres long and 2 centimetres wide.



She uses **five** of her rectangles to make the large rectangle below.



What is the **perimeter** of the large rectangle?

 cm

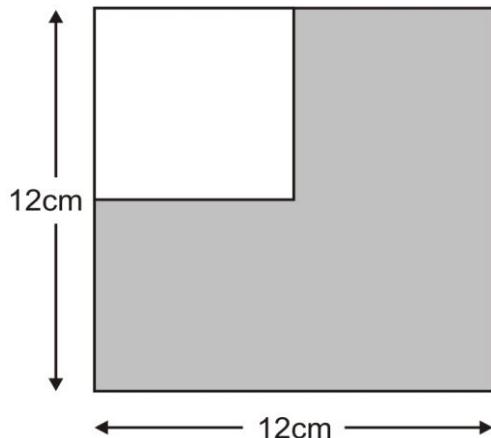
What is the **area** of the large rectangle?

 cm

12.

A white square is painted in one corner of a grey square.

Each side of the white square is **half** the length of a side of the grey square.

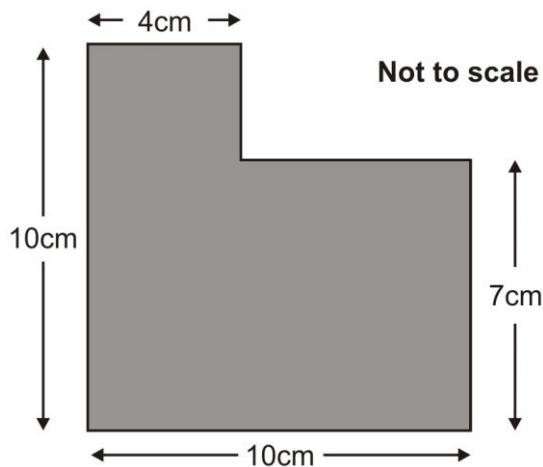


Not actual size

What is the **area** of the grey section?

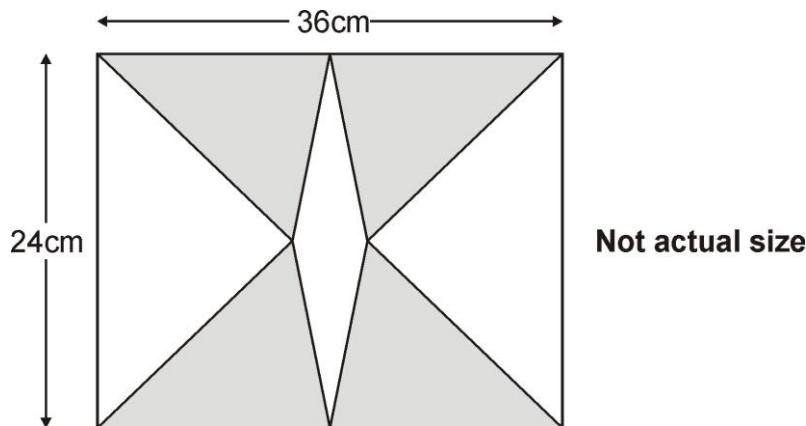
13.

What is the **area** of this shape?



14.

The diagram shows **4 identical shaded triangles** in a rectangle.



The rectangle measures **36 centimetres** by **24 centimetres**.

Calculate the **area of one shaded triangle**.