

1.

Use the words to complete the sentences.

perimeter

cm^2

cm

m

area

m^2

inside

around

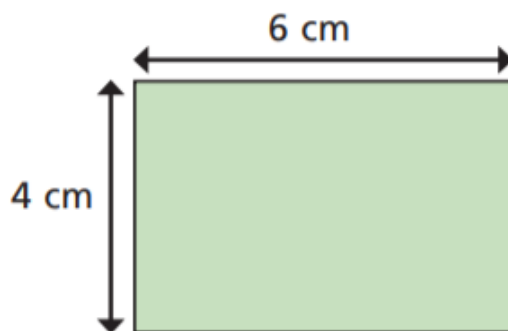
_____ is the amount of space _____ a two-dimensional shape. It can be measured in units such as _____ or _____

_____ 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.

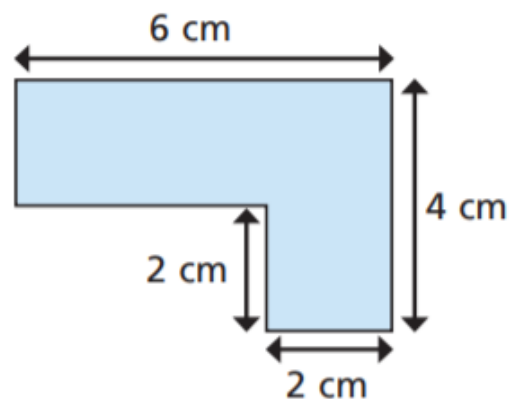
a)



perimeter = cm

area = cm^2

b)



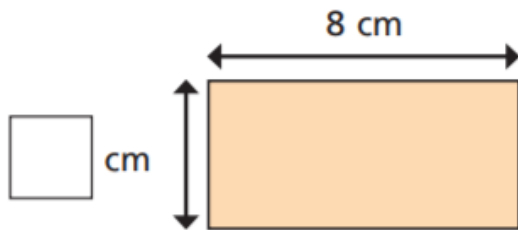
perimeter = cm

area = cm^2

3.

Work out the missing values.

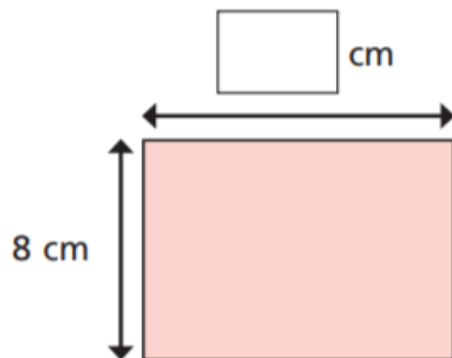
a)



area = 32 cm^2

perimeter = \square cm

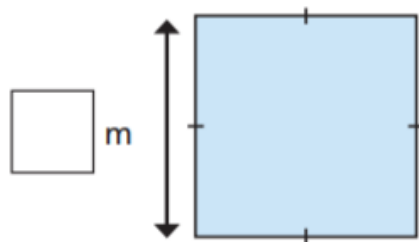
b)



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

perimeter = 40 cm

c)



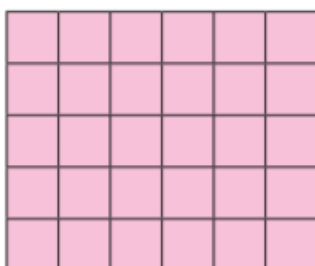
area = $\square \text{ m}^2$

perimeter = 36 m

4.

Work out the areas and perimeters of the shapes.

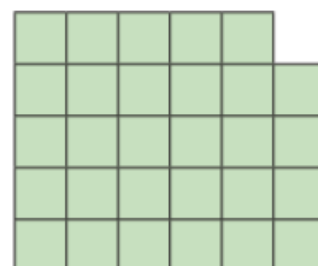
Shape A



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

perimeter = \square cm

Shape B

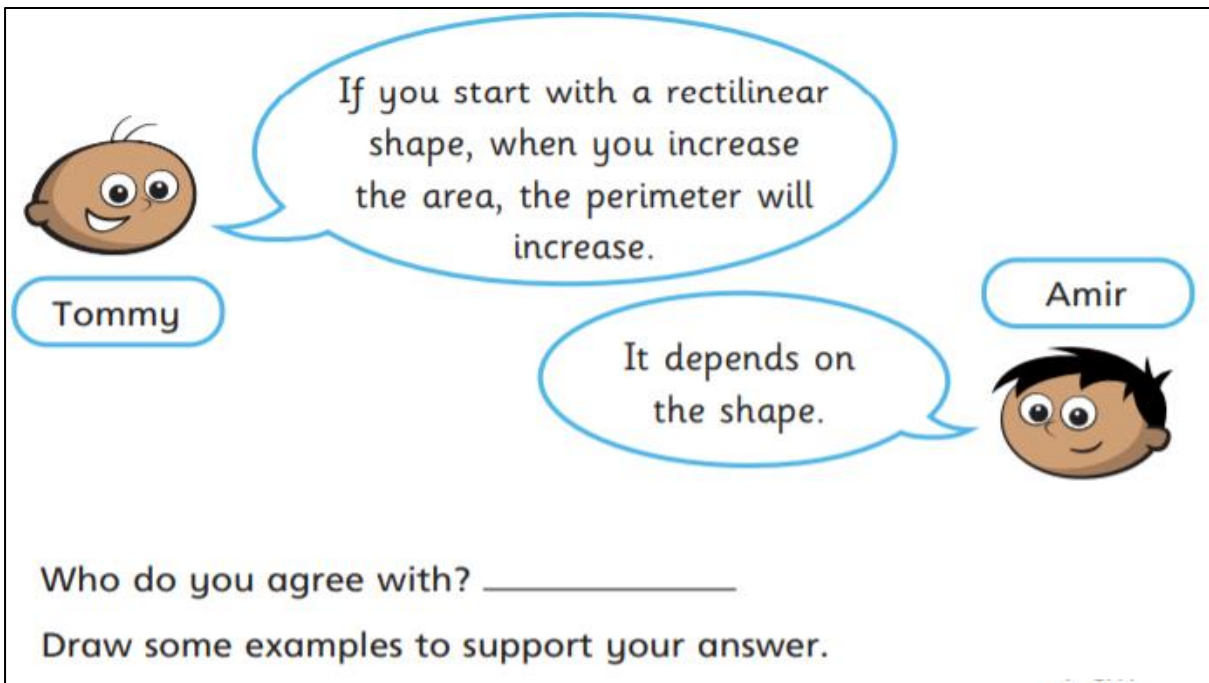


area = $\square \text{ cm}^2$

perimeter = \square 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.

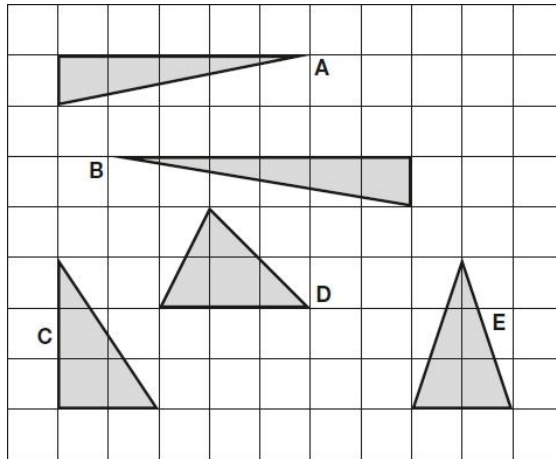


b) What is the greatest possible area of the enclosure?

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

8.

Here are five triangles on a square grid.

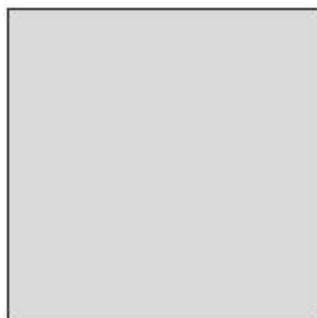


Four of the triangles have the same area.

Which triangle has a **different** area?

9.

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



Not actual size

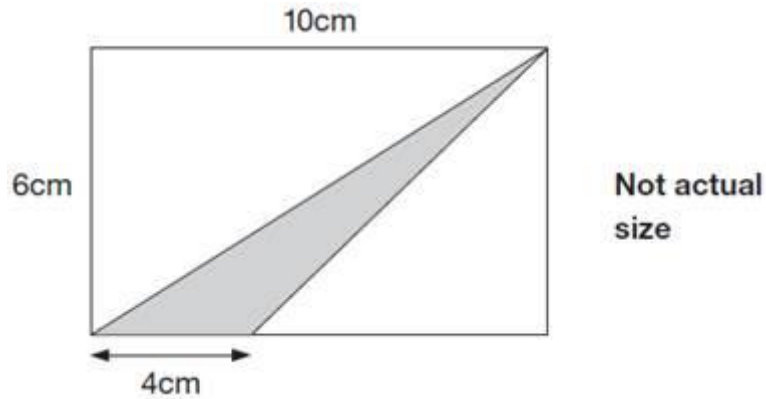
The square is cut into quarters to create 4 identical rectangles.



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?

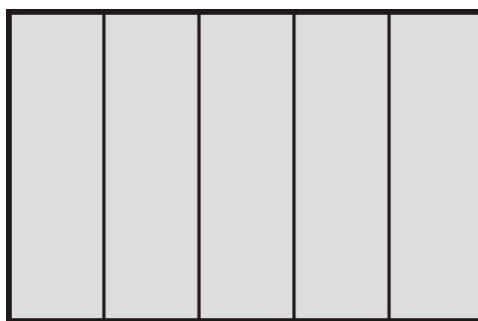
11.

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.



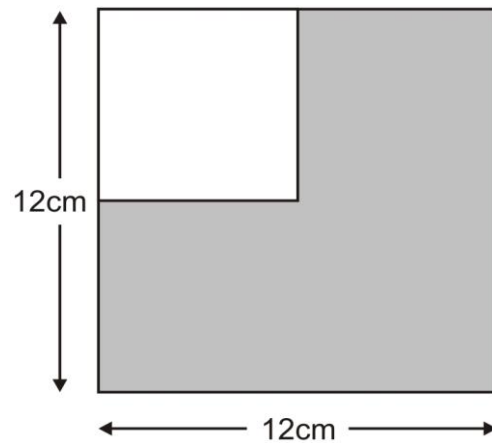
What is the **perimeter** of the large rectangle?

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

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.

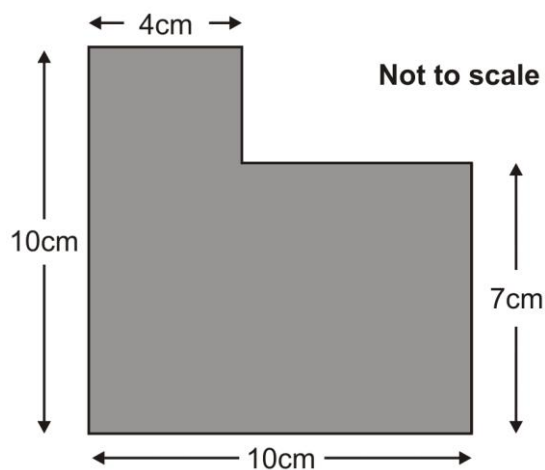


Not actual size

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

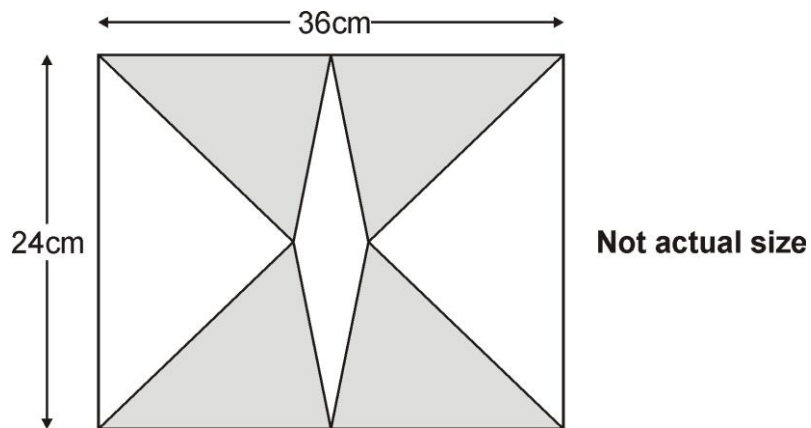
13.

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**.