

Thursday 30th April 2020

L.O. To calculate the perimeter of a shape .

I understand what the perimeter of a shape is.

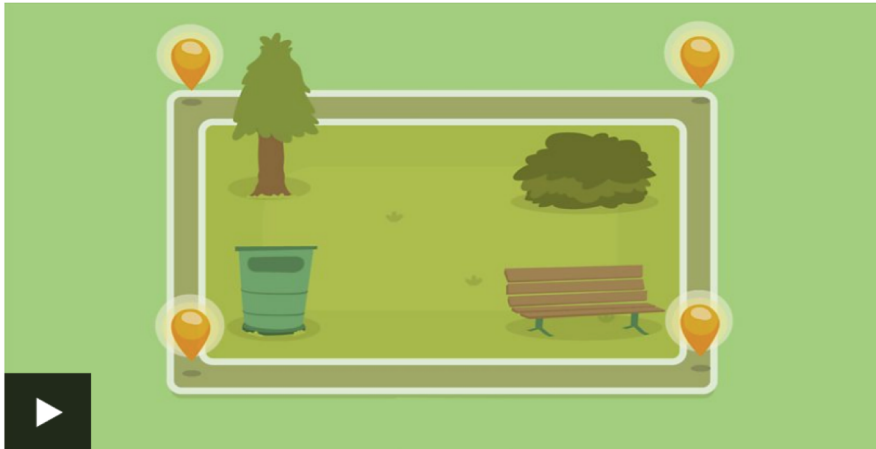
I can calculate the perimeter of a shape.

I can use my knowledge of perimeter to problem solve.

What is the perimeter?

Part of **Maths** | **2D shapes**

+ Add to My Bitesize

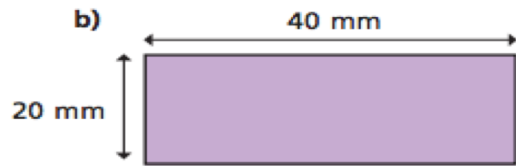
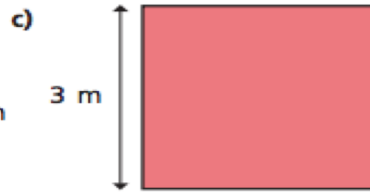
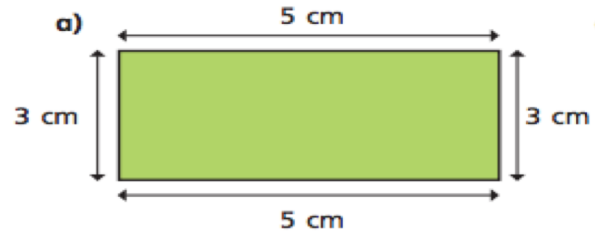


Calculating perimeter
The perimeter is the distance all the way around the outside of a 2D shape.

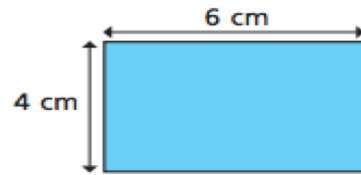
To work out the perimeter, add up the lengths of all the sides.

Task 1

1 Work out the perimeter of each shape.



2 Rosie and Eva work out the perimeter of the shape below.



Rosie

$6 + 4 = 10$,
so the perimeter is
10 cm.



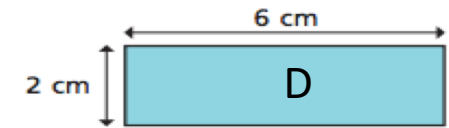
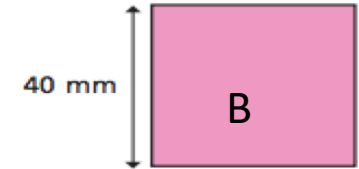
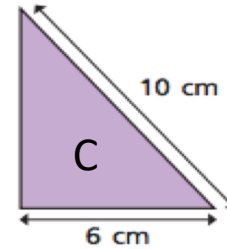
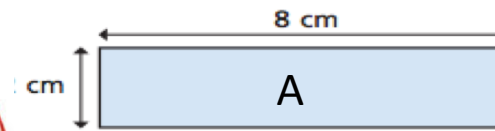
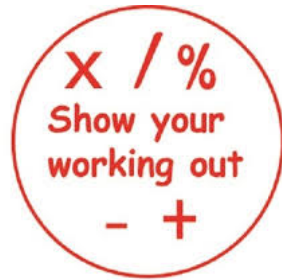
Eva

The perimeter is
20 cm.

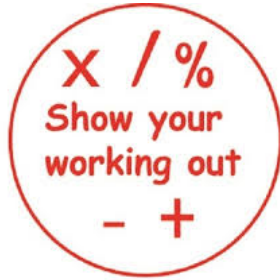
Who is correct?

How do you know?

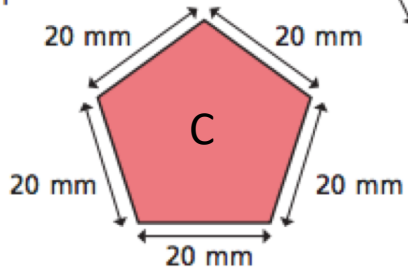
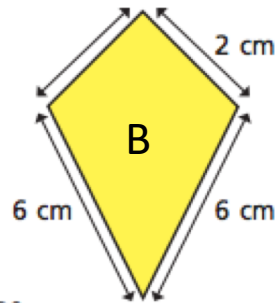
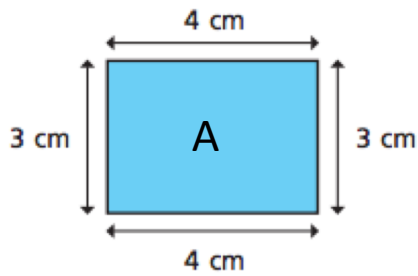
3 Which shapes have a perimeter of 16 cm.



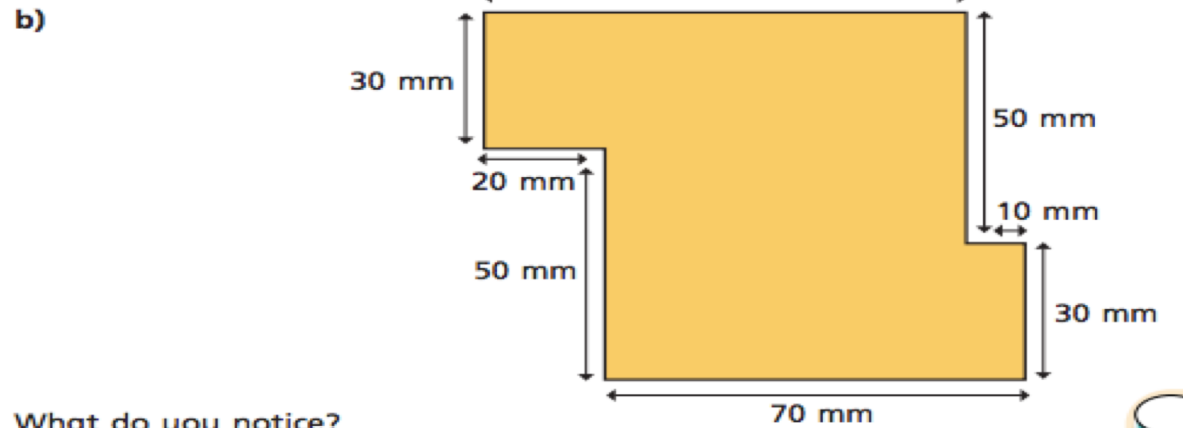
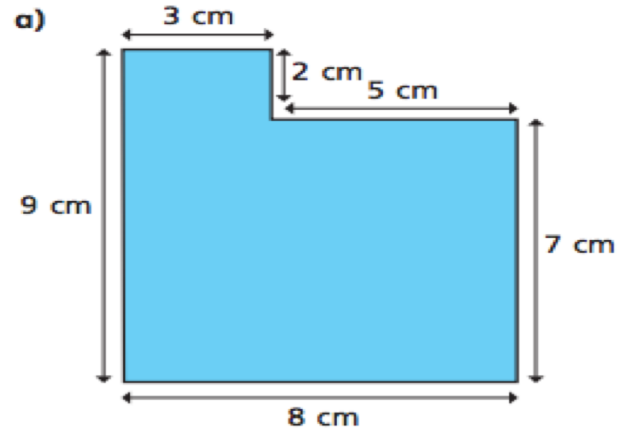
Task 2



4 Which shape has the longest perimeter? Tick your answer.

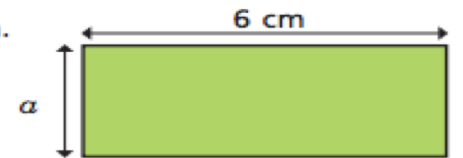


5 Work out the perimeter of these shapes.



What do you notice?

6 This rectangle has a perimeter of 18 cm. Work out the length of side a .



Challenge 1

Teddy says,



You only need to know the length of one side of these 2-D shapes to work out the perimeter.



Do you agree with Teddy?
Explain your answer.

Challenge 2



Each side of this shape is of equal length.
The perimeter is 60 cm.
How long is each side?

Time to mark your work

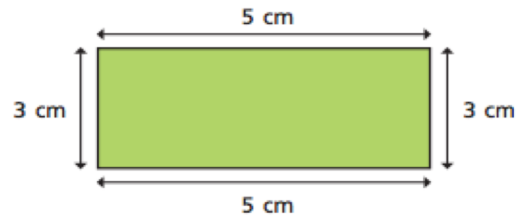
Answers below!



Task 1

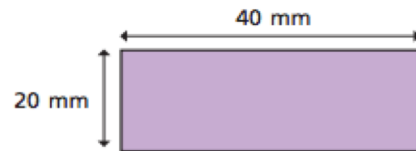
1 Work out the perimeter of each shape.

a)



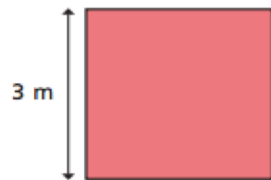
perimeter = cm

b)



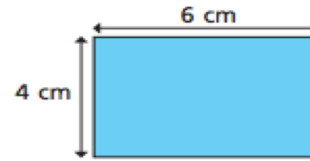
perimeter = mm

c)



perimeter = m

2 Rosie and Eva work out the perimeter of the shape below.



Rosie

$6 + 4 = 10$,
so the perimeter is
10 cm.



Eva

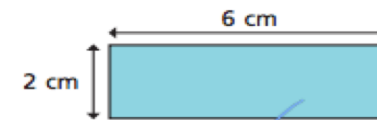
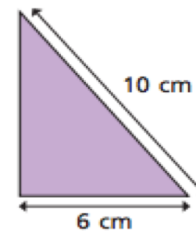
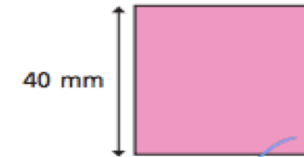
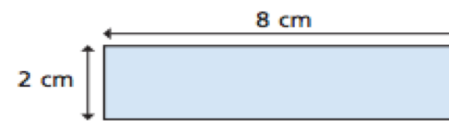
The perimeter is
20 cm.

Who is correct? Eva

How do you know?

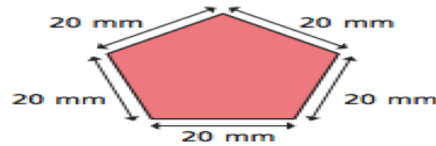
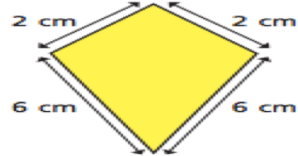
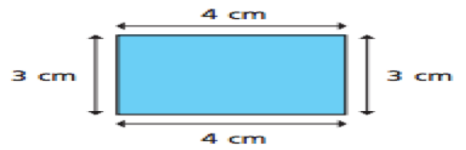
Rosie hasn't included the other two
sides.

3 Tick the shapes with a perimeter of 16 cm.



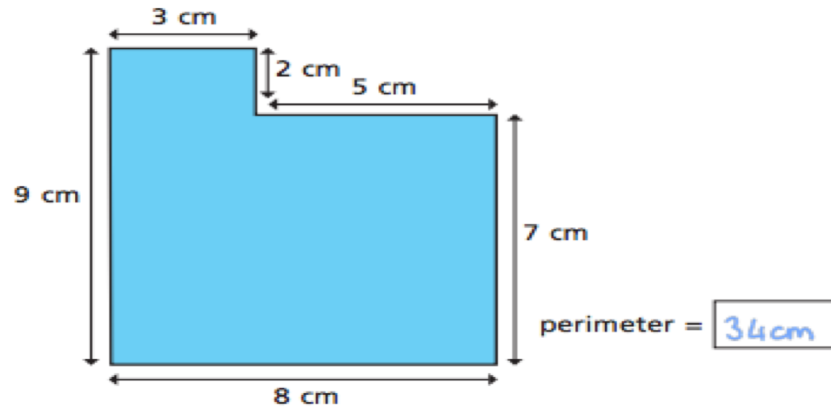
Task 2

4 Which shape has the longest perimeter? Tick your answer.

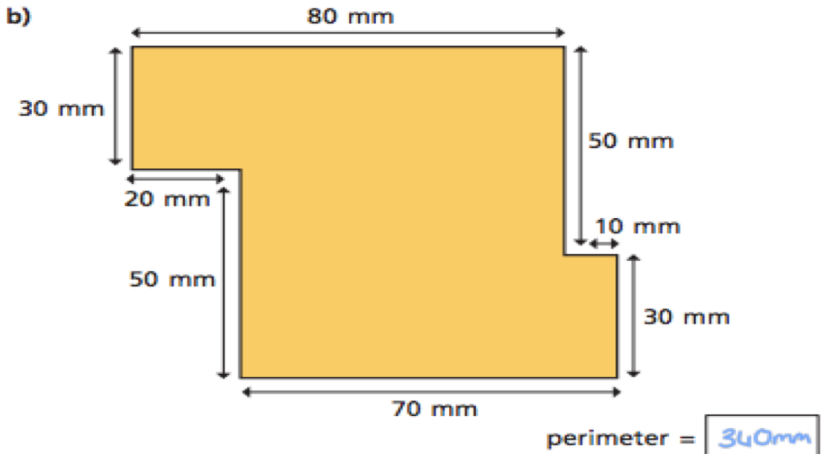


5 Work out the perimeter of these shapes.

a)

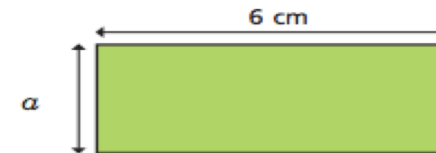


b)



What do you notice?

6 This rectangle has a perimeter of 18 cm.
Work out the length of side a .



perimeter = 18 cm

side a = 3 cm

Challenge 1

Teddy says,



You only need to know the length of one side of these 2-D shapes to work out the perimeter.



Do you agree with Teddy?
Explain your answer.

You only need to know the length of one side for the square and the pentagon as all the sides are the same.

However, Teddy is wrong because for the rectangle you need to know two lengths and for the triangle you need to know all of them.

Challenge 2



Each side of this shape is of equal length.
The perimeter is 60 cm.
How long is each side?

The shape has 10 sides so the length of each side is 6 cm

Don't forget to self assess neatly at the end! You can add a comment if you like.



Now, take a photo of your work and upload it to the homework page Maths 30.04.20!