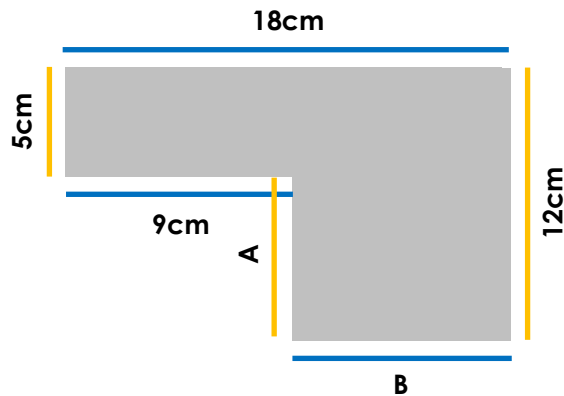




**FLUENCY 1**

Copy the stem sentence to help you find the missing side lengths. Use the colours to help.

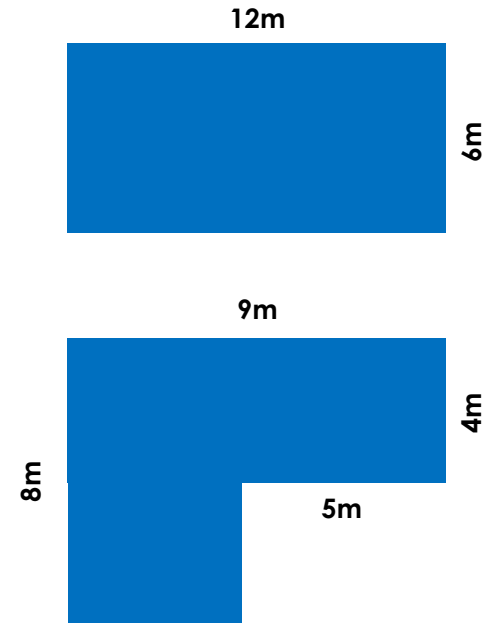


To find the missing side length \_\_\_\_\_, you find the difference between \_\_\_\_\_ cm and \_\_\_\_\_ cm.

**NOW...** calculate the area and perimeter!

**FLUENCY 2**

Find the difference between the shapes' areas and the shapes' perimeters.



The area is \_\_\_\_\_ m<sup>2</sup>.

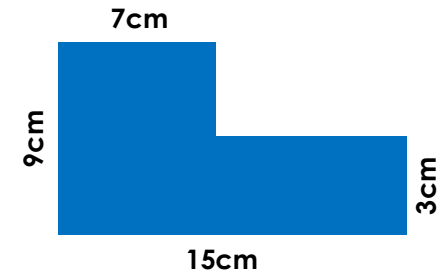
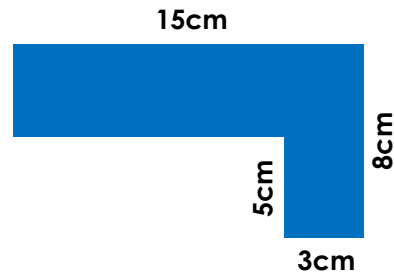
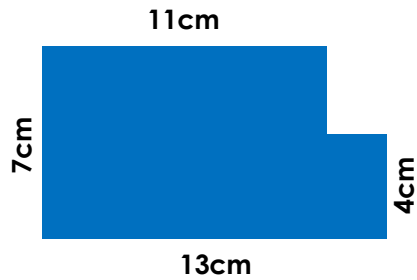
The perimeter is \_\_\_\_\_ m.





FLUENCY 3

Match the shapes to the statements.



Odd Area

Even Perimeter  
and Area

Area + Perimeter  
Values = Cube  
Number





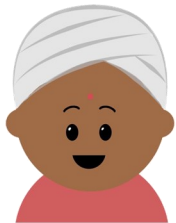
REASONING 1

Explain how you can use the information given to find the area of 'Box A'.

64cm <sup>2</sup>	88cm <sup>2</sup>
24cm <sup>2</sup>	Box A

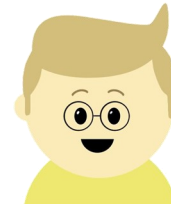
REASONING 2

True or False?



It is impossible for a quadrilateral to have the same value for its area and perimeter.

Explain why!



REASONING 3

Alfie is struggling with the following question on his reasoning test...

Below is the floor plan of a restaurant. It has a dining area and an outside space.

Calculate the perimeter of the site and the area of the dining space.

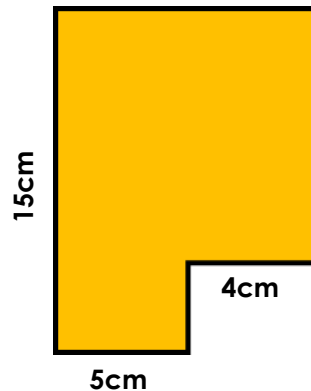
What advice would you give to Alfie to help him find the answers?





**REASONING 4**

Can you find the area and perimeter of this rectilinear shape?



Explain why or why not!

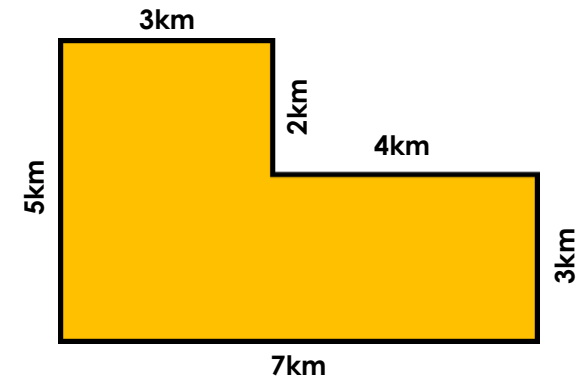
**REASONING 5**

True or False? Explain Why!

1. To find the area of a rectangle or rectilinear shape, you multiply all of the side lengths.
2. To find the perimeter of a rectangle or rectilinear shape, you add all of the side lengths.

**REASONING 6**

After being given all of the dimensions of a plot of land, two children are discussing their first steps for finding its area.



Asha says, "I would split the shape up and do  $4 \times 3$  and  $5 \times 3$ ".



Jerry says, "I would still split the shape up into two rectangles. However, I would do  $7 \times 3$  and  $2 \times 3$ ".

Whose method is correct? Convince me!



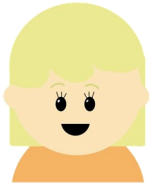


**PROBLEM SOLVING 1**

Some children are describing a rectilinear shape. Draw what they could be seeing from the clues they give...



“One side is 11cm.”



“Two sides are the same length.”



“The shape’s area is greater than  $80\text{cm}^2$  but less than  $90\text{cm}^2$ .”

Is there more than one solution?  
Find all possibilities!

**PROBLEM SOLVING 2**

A rectilinear shape is split up into two rectangles. One of the areas is  $24\text{m}^2$  ; the other’s is  $64\text{cm}^2$ .

Find all possible dimensions for the shape.  
Do you notice any patterns?

**PROBLEM SOLVING 3**

A zoo wants to make the biggest rectangle/rectilinear enclosure possible for its flamingos.

It has 55 one-metre fence panels.

Find the best dimensions for the enclosure which will give them the biggest area.

