

Fast 5

1. 665 divided by $5 =$

2. $\frac{3}{5}$ of $65 =$

3. $456 \times 23 =$

4. $1256 - 854 =$

5. $2.56 + 0.5 =$

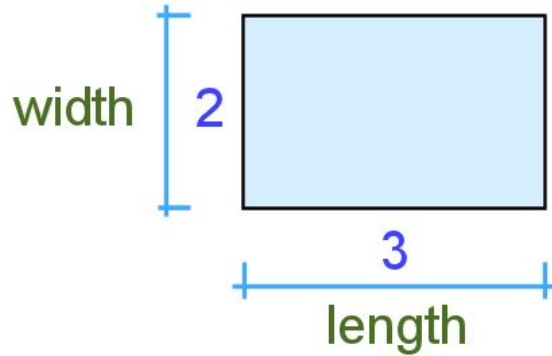
Fast 5

1. 665 divided by 5 = 133
2. $\frac{3}{5}$ of 65 = 39
3. $456 \times 23 = 10,488$
4. $1256 - 854 = 402$
5. $2.56 + 0.5 = 2.06$

Can I recognise that shapes can have the same area but different perimeters?

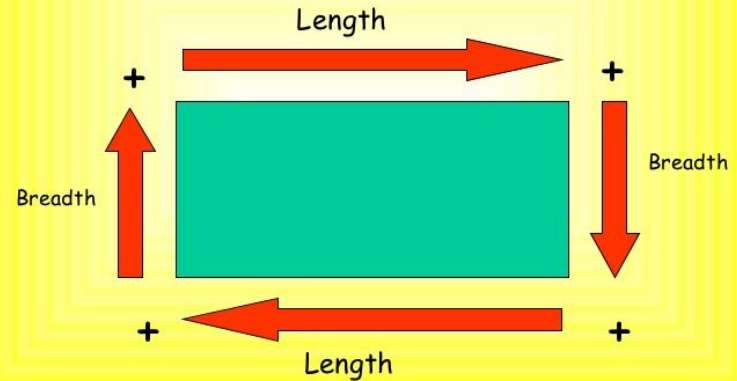
Measuring shapes

Shapes have an area and a perimeter

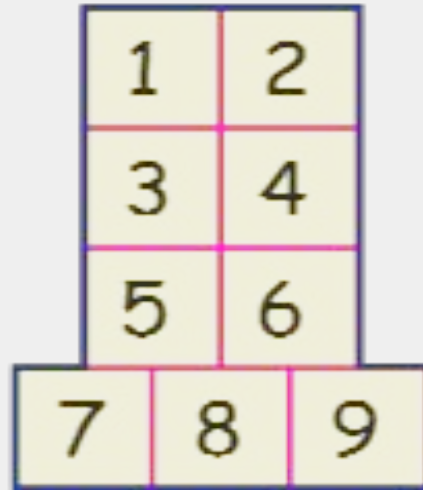
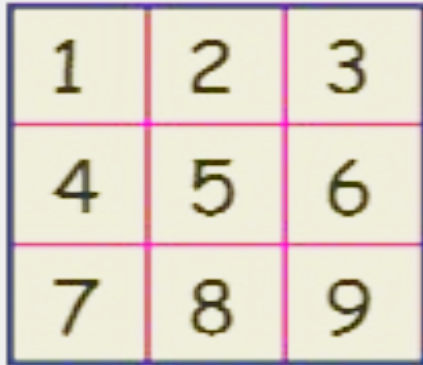
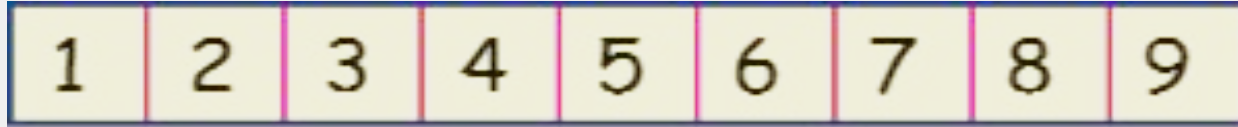


$$\text{Area} = \text{length} \times \text{width}$$

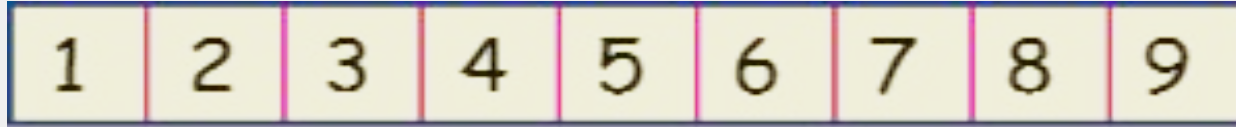
The perimeter is found by adding up all the **length** and **breadth** measurements.



Some shapes can have the same area but different perimeters. Both of these shapes have an area of 9cm^2 . Calculate their perimeters.



Some shapes can have the same area but different perimeters. Both of these shapes have an area of 9cm^2 . Calculate their perimeters.



$P = 20$



$P = 12$



$P = 14$

Calculate the Perimeter - how can we work out the missing length?

What is the perimeter of the figure below?

The diagram shows a composite polygon with the following labeled sides:

- Top-left horizontal side: 5 cm
- Top-right vertical side: 3 cm
- Inner horizontal side: 4 cm
- Right vertical side: 4 cm
- Bottom horizontal side: 9 cm
- Left vertical side: missing

A small tree icon is visible in the bottom right corner of the diagram area.

Calculate the Perimeter - how can we work out the missing length?

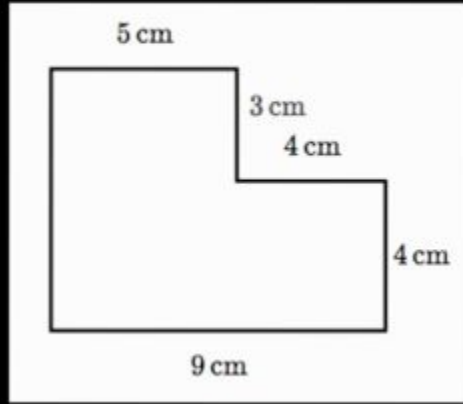
The missing length is found by adding the total of the 2 parallel lengths on the other side $4\text{cm} + 3\text{cm} = 7\text{cm}$.

So to calculate the total perimeter,

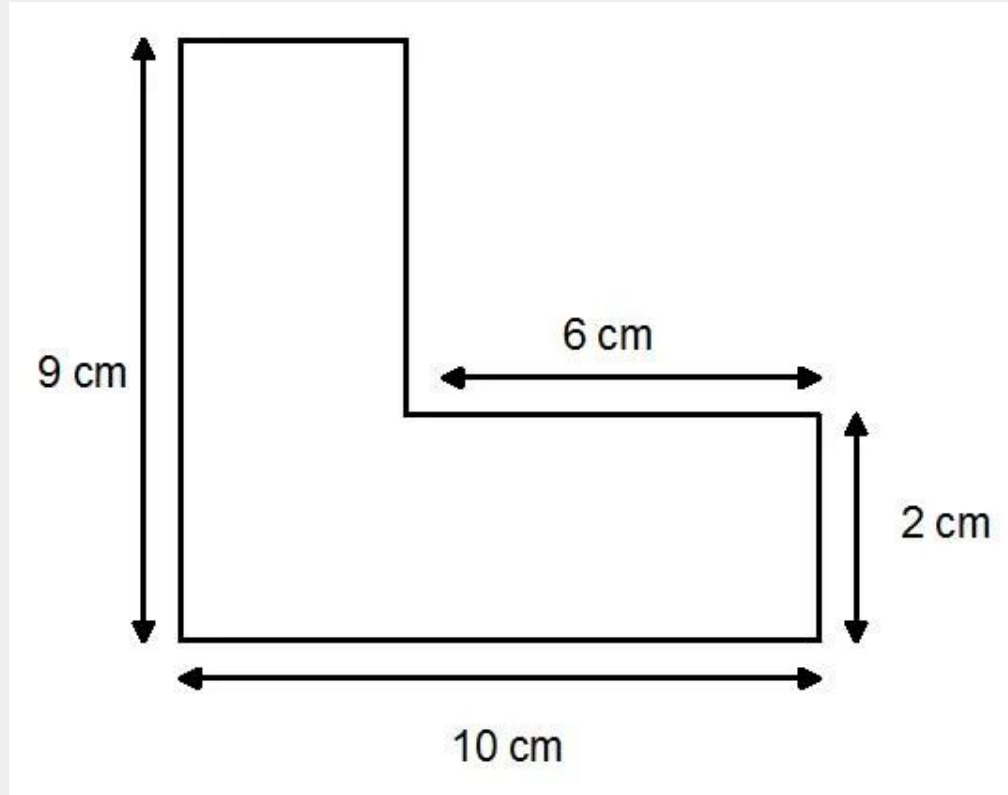
we must add

$$5+3+4+4+9+7 = 32\text{cm}$$

What is the perimeter of the figure below?



Calculate the perimeter - use the information given to calculate the missing lengths



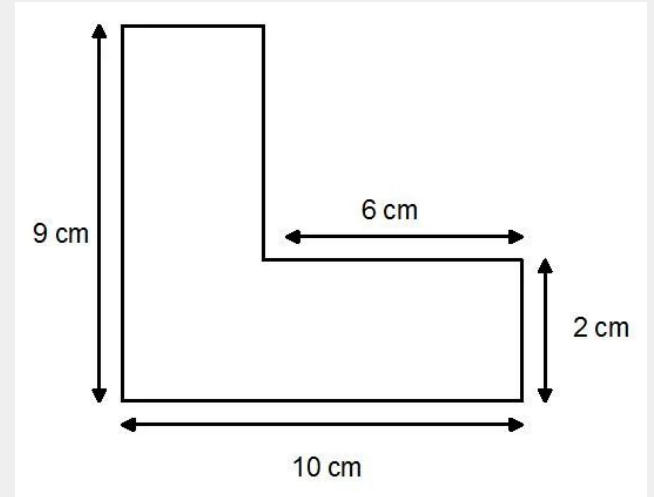
Calculate the perimeter - use the information given to calculate the missing lengths

The top width is found by $10\text{cm} - 6\text{cm} = 4\text{cm}$

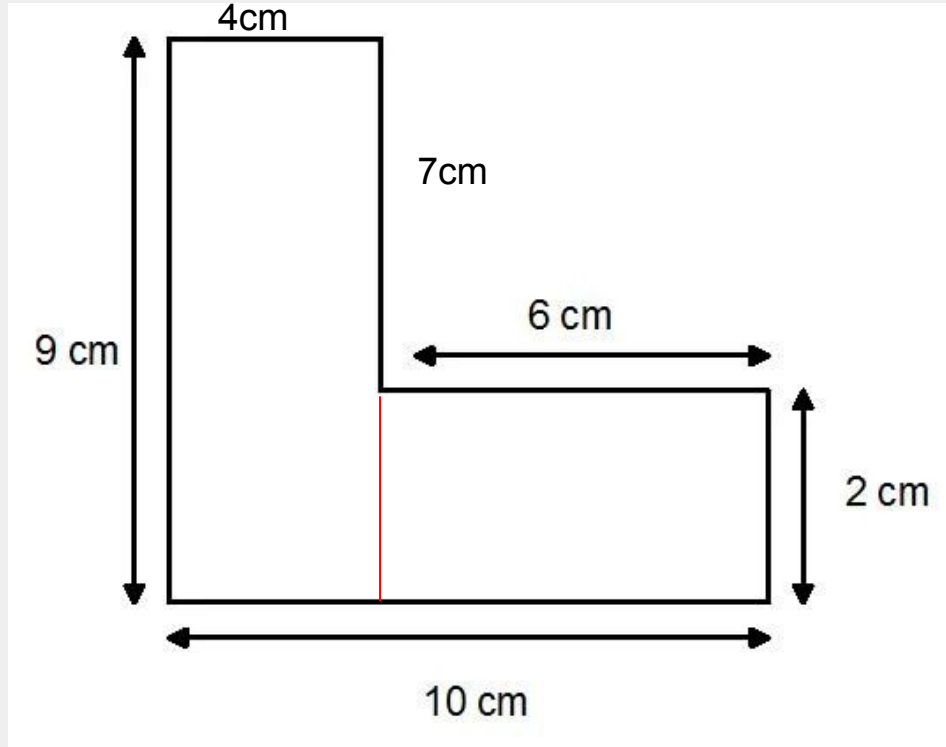
The side length is $9\text{cm} - 2\text{cm} = 7\text{cm}$

Now we can work out the perimeter

$$4 + 7 + 6 + 2 + 10 + 9 = 38$$



Calculate the area - first divide the compound shape into 2 rectangles as shown



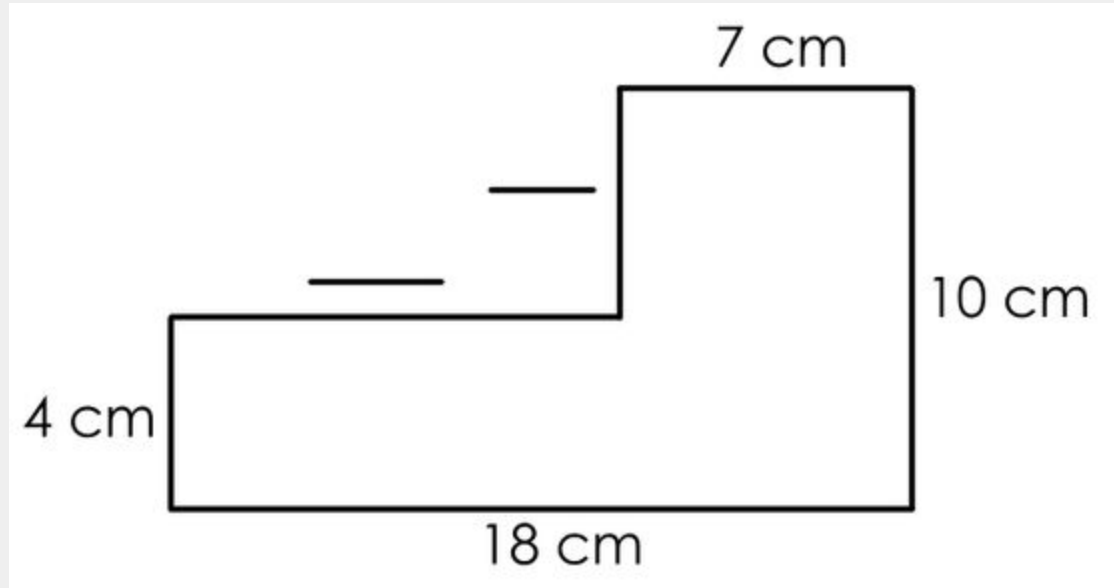
2 rectangles are
 $9\text{cm} \times 4\text{cm} = 32\text{cm}^2$

$$6\text{cm} \times 2\text{cm} = 12\text{cm}^2$$

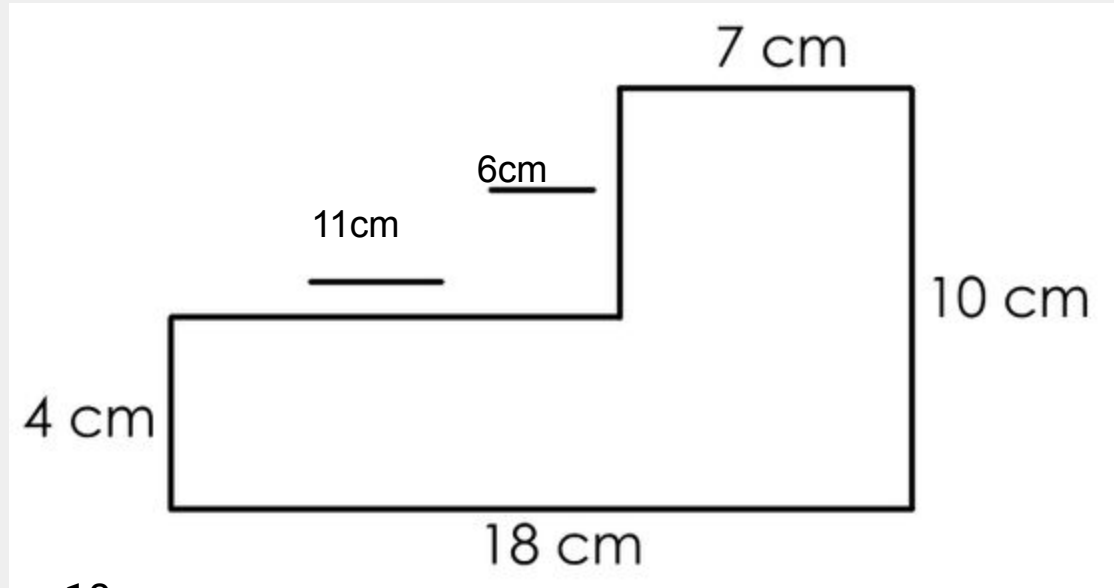
Now we add them together to
get the whole area,

$$32\text{cm}^2 + 12\text{cm}^2 = 44\text{cm}^2$$

Calculate the perimeter - use the information in the diagram



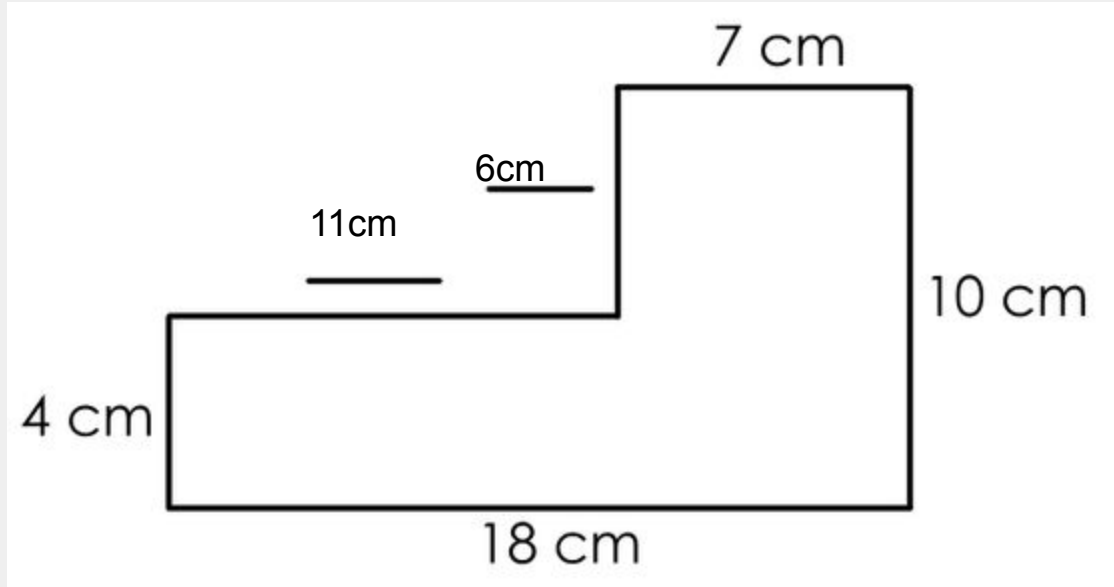
Calculate the perimeter - use the information in the diagram



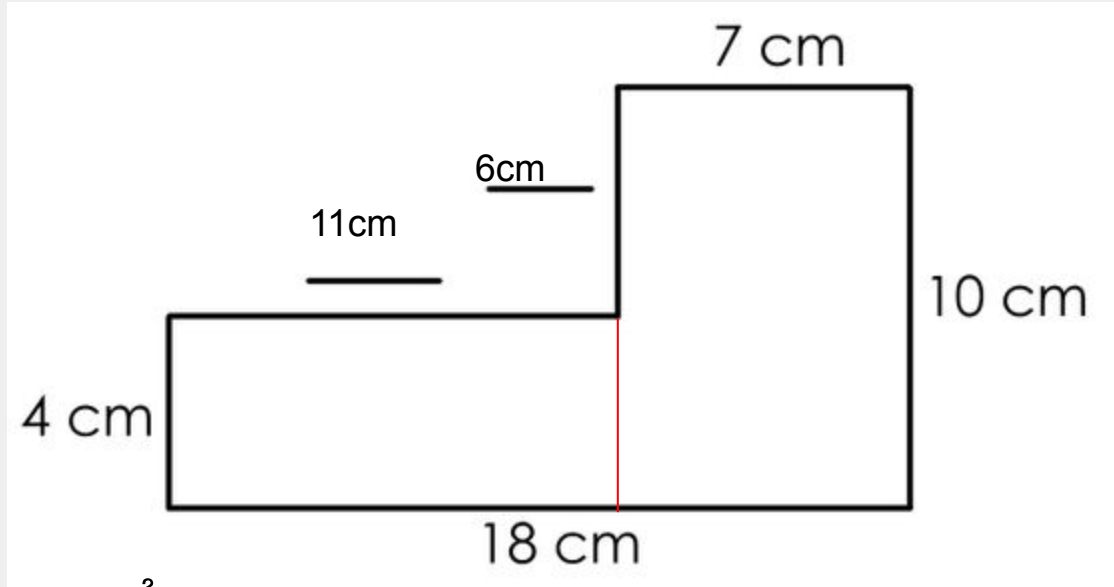
$$\begin{aligned} \text{Perimeter} &= 10 \\ &+ 7 + 6 + 11 + 4 + 18 \end{aligned}$$

$$\text{Perimeter} = 56 \text{ cm}$$

Calculate the area - divide the shape into two rectangles



Calculate the area - divide the shape into two rectangles



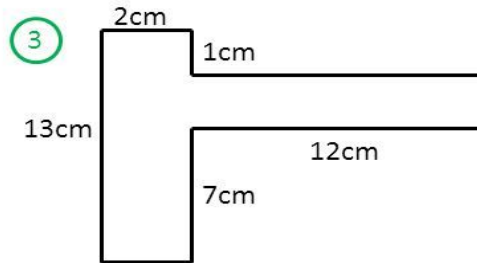
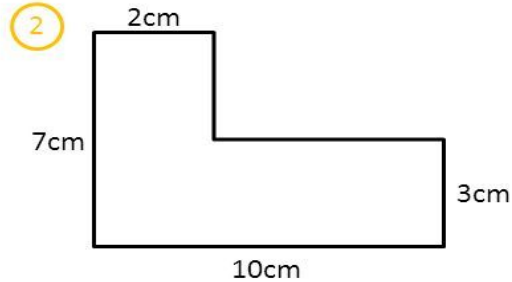
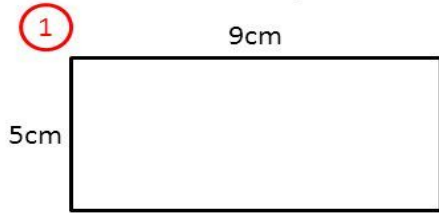
$$\text{Rectangle 1} = 4\text{cm} \times 11\text{cm} = 44\text{cm}^2$$

$$\text{Rectangle 2} = 7\text{cm} \times 10\text{cm} = 70\text{cm}^2$$

$$\begin{aligned} \text{Area} &= 44\text{cm}^2 + 70\text{cm}^2 \\ &= 114\text{cm}^2 \end{aligned}$$

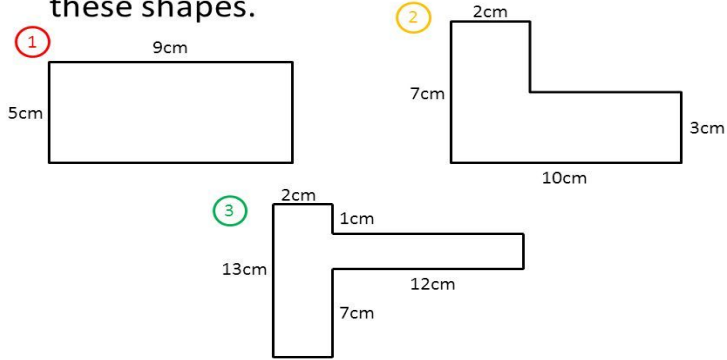
Try this:

Calculate the area and perimeter of each of these shapes.



Answers

Calculate the area and perimeter of each of these shapes.



	area	Perimeter
1	45cm^2	28cm
2	38cm^2	34cm
3	86cm^2	54cm

Tasks

Red

On the next slide are some shapes, calculate the area and perimeter for shapes A to G. Record these in a table.

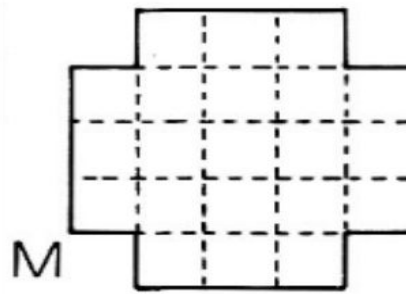
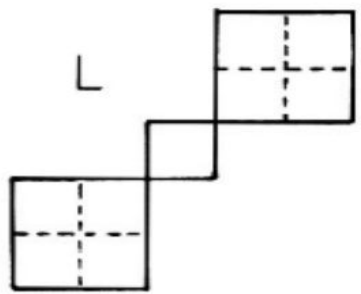
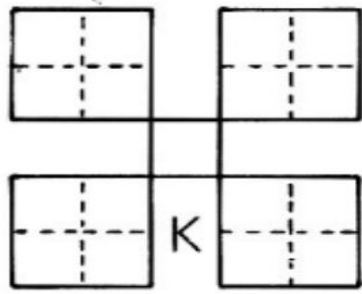
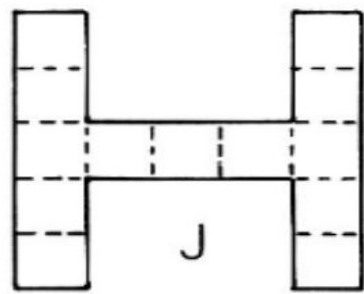
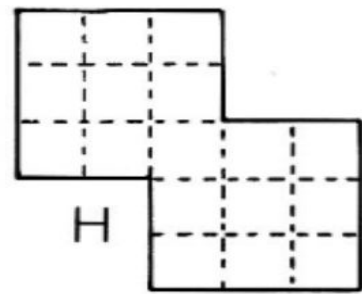
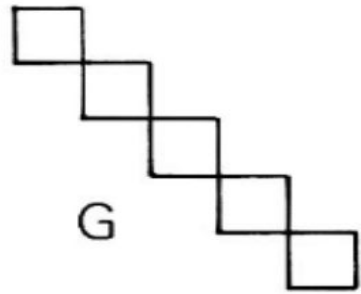
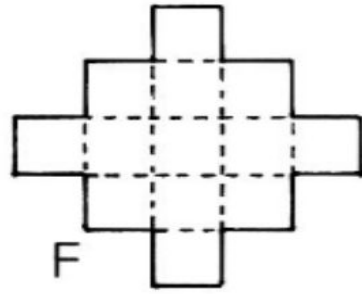
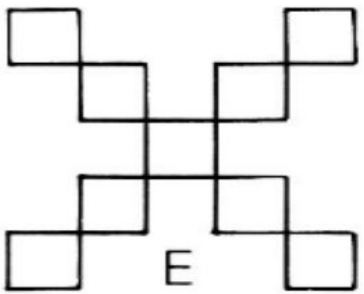
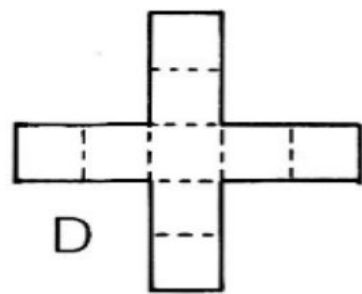
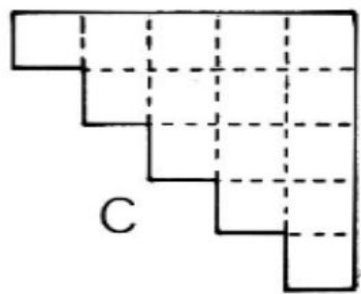
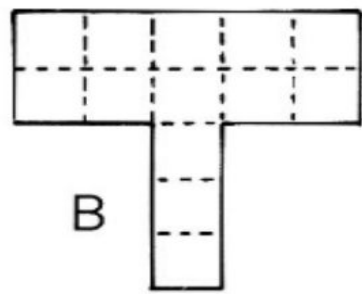
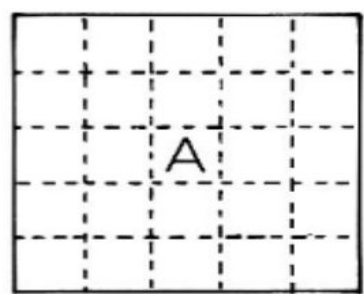
Yellow

On the next slide are some shapes, calculate the area and perimeter for all the shapes. Record these in a table. Which shapes have the same perimeter, but different areas?

Green

On the next slide are some shapes, calculate the area and perimeter for all the shapes. Record these in a table. Which shapes have the same perimeter, but different areas?

Draw as any different shapes, with an area of 12 but different perimeters.



Shapes M H G A C have a perimeter of 20 , but different areas

L and D have the same area

F and B have the same area

Shape	Area	Perimeter
A	25	20
B	13	20
C	15	20
D	9	20
E	9	3
F	13	20
G	5	20
H	17	20
J	13	28
K	17	36
L	9	20
M	21	20