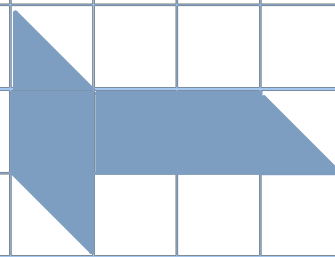
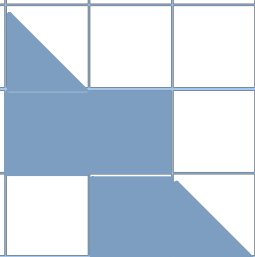
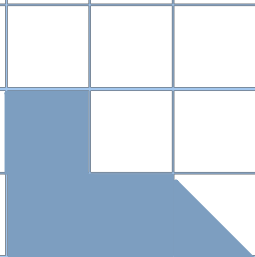
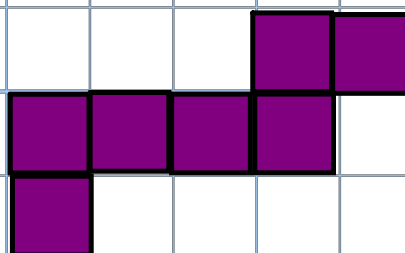
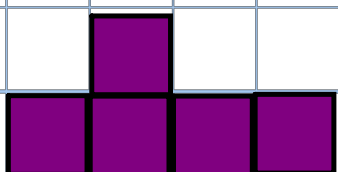


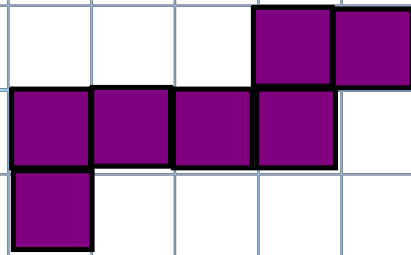
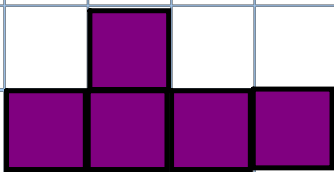
Find the area of these shapes:



Area

Page 98 A1-A4

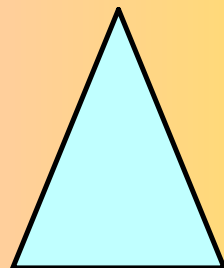
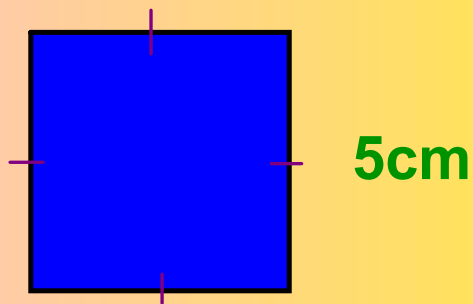
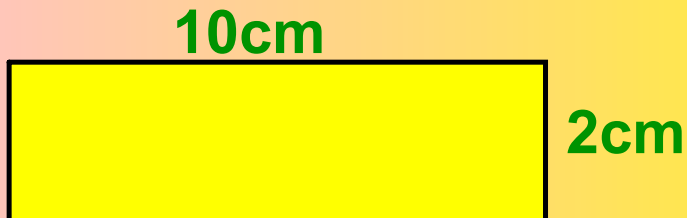
**Find the perimeter of these shapes:**



**Draw another shape with area                      but with  
a smaller perimeter.**

**Draw another shape with area                      but with  
a larger perimeter.**

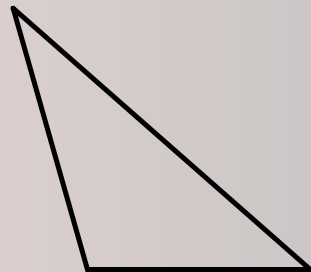
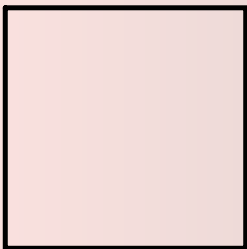
# Perimeter



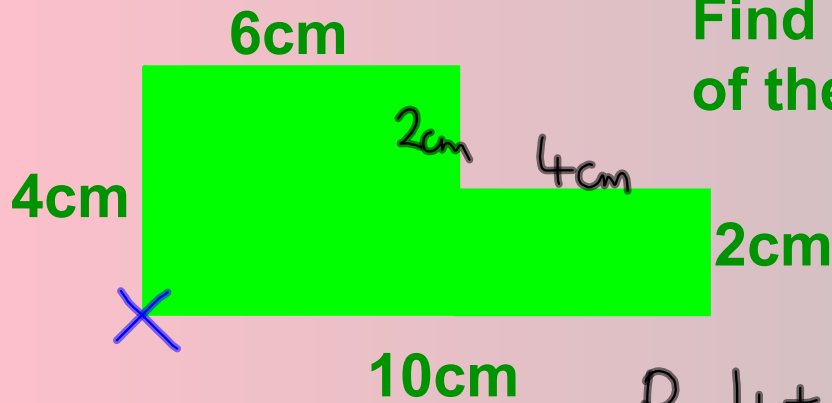
An equilateral triangle with sides 7cm

**Draw a rectangle, square and triangle where each one has a perimeter of 36cm.**

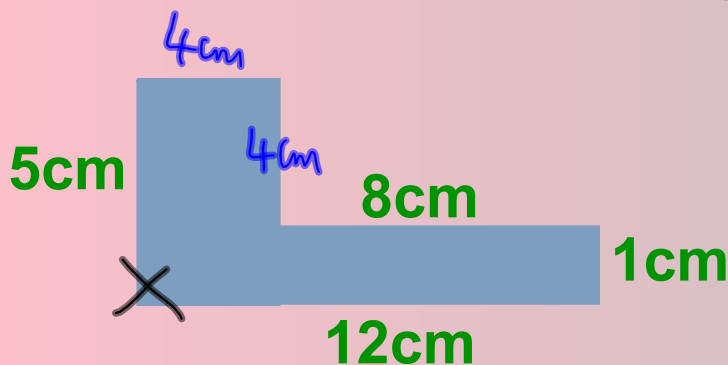
**Give these shapes dimensions so that they have a perimeter of 24cm.**



Find the perimeter of the shapes.



$$P = 4 + 6 + 2 + 4 + 2 + 10 = 28 \text{ cm}$$



$$P = 5 + 4 + 4 + 8 + 1 + 12 = 34 \text{ cm}$$

Draw 3 shapes, made up of rectangles, with perimeter of 30cm.

I have 10m of fencing for a guinea pig run.

Draw some possible shapes I could make the run.



Write an expression for the perimeter of the rectangle.

x

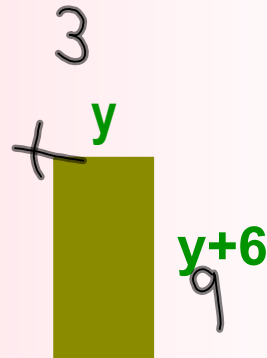
y

$$P = 2x + 2y$$

a) write an expression for the perimeter of the rectangle

b) What is the perimeter if  $y = 3\text{cm}$

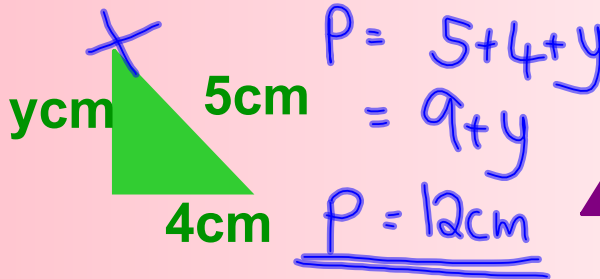
$$\begin{aligned} P &= y + y + 6 + y + y + 6 \\ &= 4y + 12 \\ &= 24 \end{aligned}$$



For each shape below

a) write an expression for the perimeter

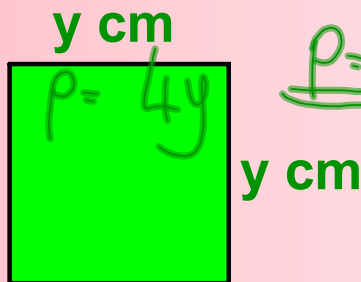
b) What is the perimeter if  $y = 3\text{cm}$



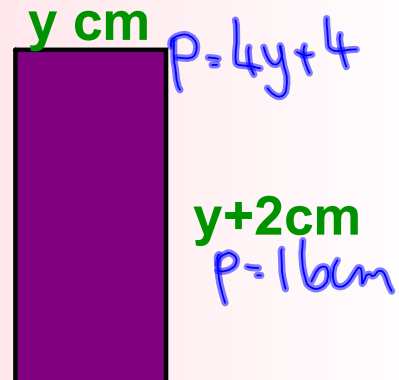
$$\begin{aligned} P &= 5 + 4 + y \\ &= 9 + y \\ \underline{P} &= \underline{12\text{cm}} \end{aligned}$$



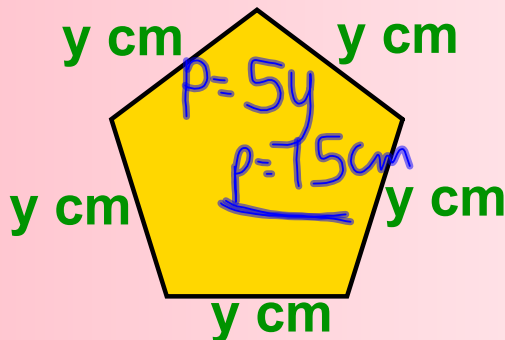
$$\begin{aligned} P &= 2y + 12 \\ P &= 18\text{cm} \end{aligned}$$



$$\underline{P} = \underline{4y}$$



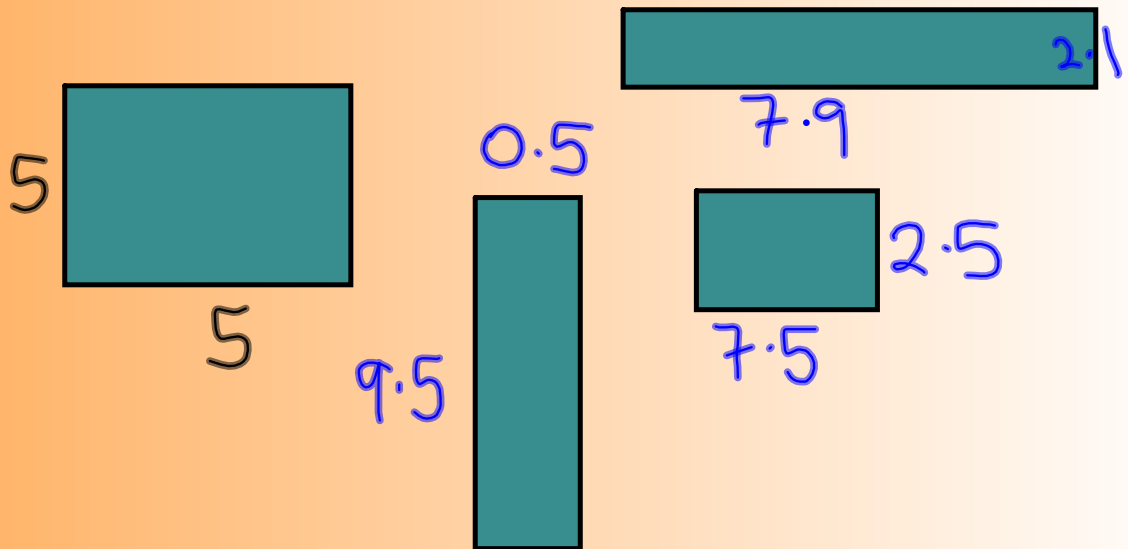
$$\begin{aligned} P &= 4y + 4 \\ P &= 16\text{cm} \end{aligned}$$



$$\begin{aligned} P &= 5y \\ P &= 75\text{cm} \end{aligned}$$



**Draw 5 rectangles with perimeter of 20cm.**



Which of these has bigger area?

Put them in order starting with the smallest.

My poster 4 

Your hand 1

The classroom door 5

Your exercise book 2

A football field 6

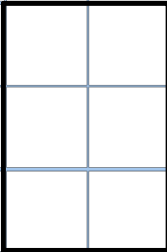
A bicycle wheel 3



angles

Find the area of these shapes.

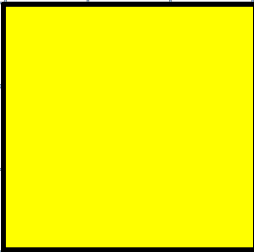
1.



2.



3.



4.



5.



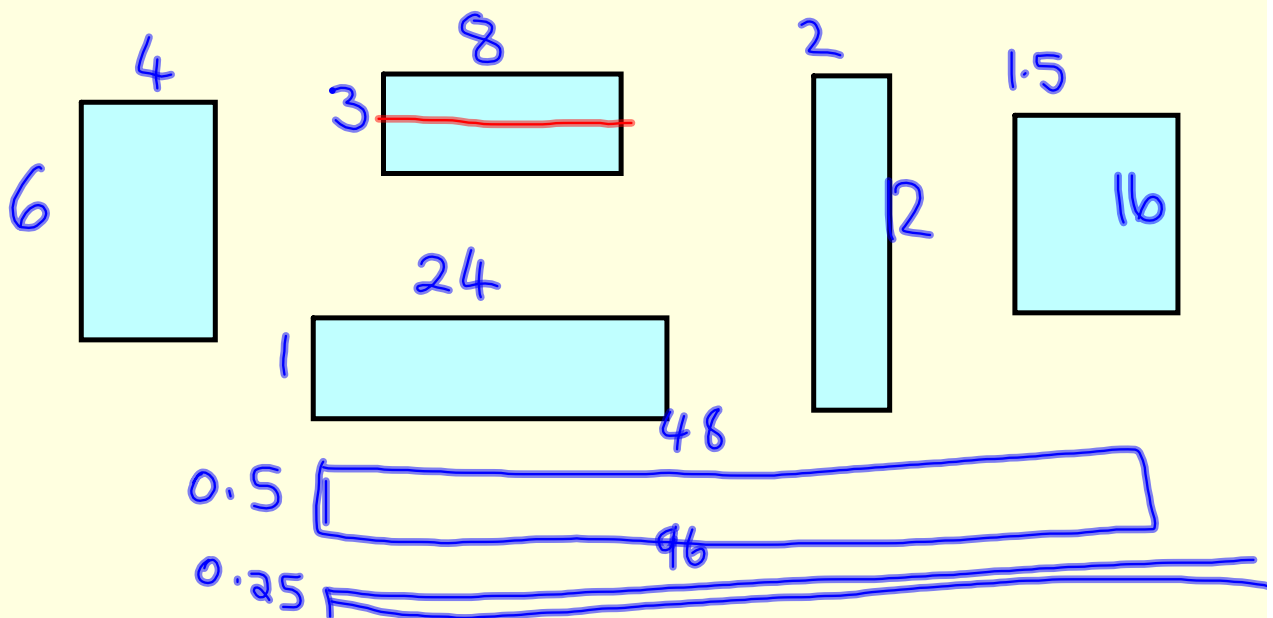
SSM2: Area and perimeter

**Area of a rectangle = length x width**

**Perimeter of a rectangle =  $2l + 2w$**

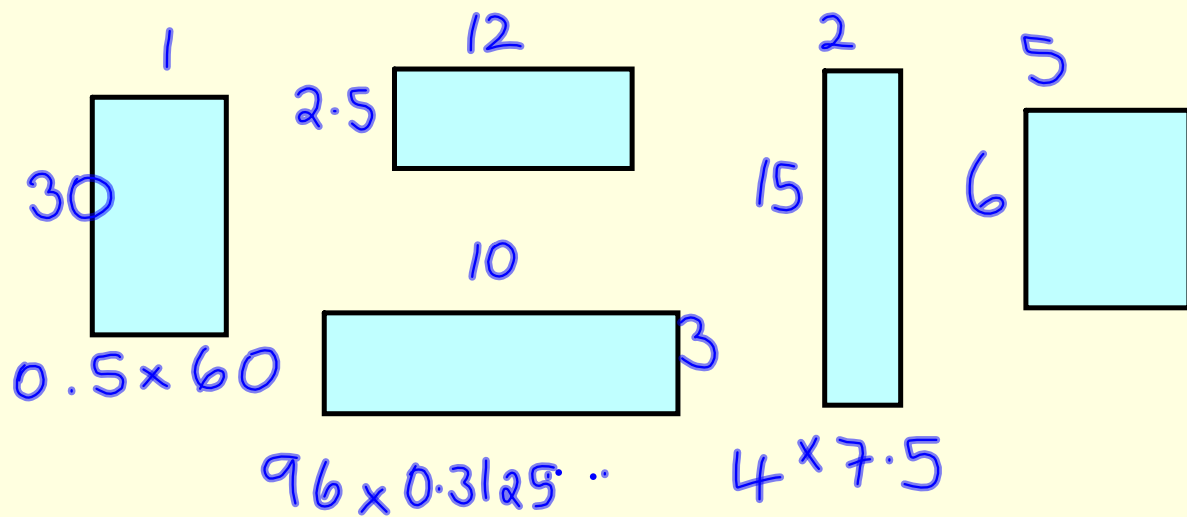
**Page 250 and 251**

Sketch 5 rectangles with area  $24\text{cm}^2$



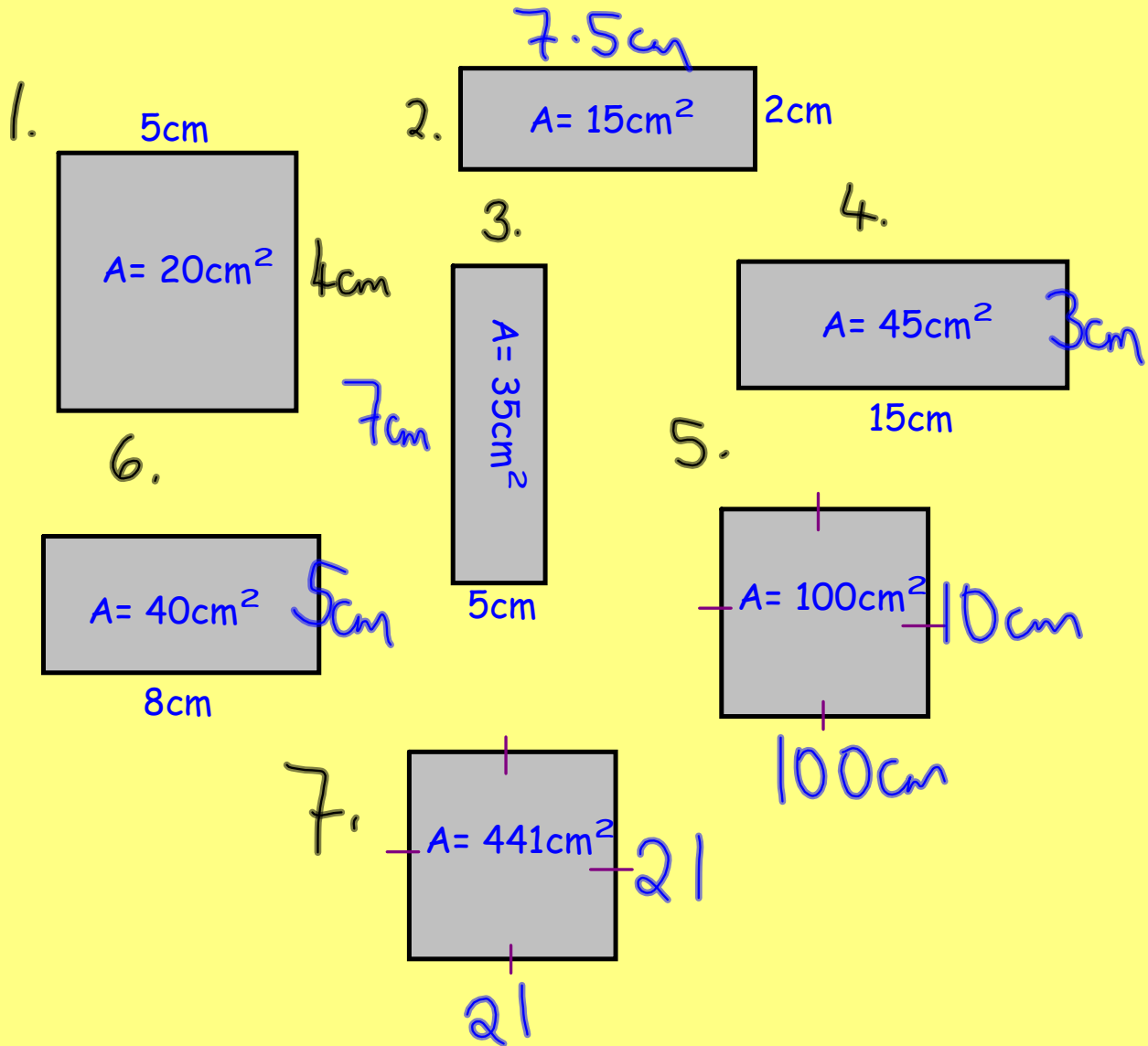
Can you draw a square with area  $24\text{cm}^2$  ?

Sketch 5 rectangles with area  $30\text{cm}^2$



Can you draw a square with area  $30\text{cm}^2$  ?

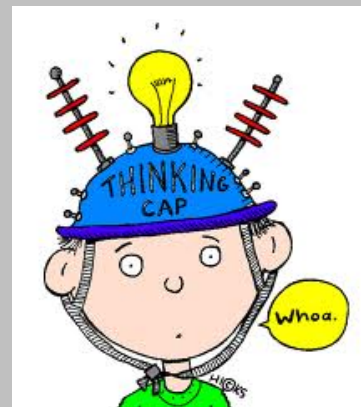
Find the lengths of missing sides in these rectangles.

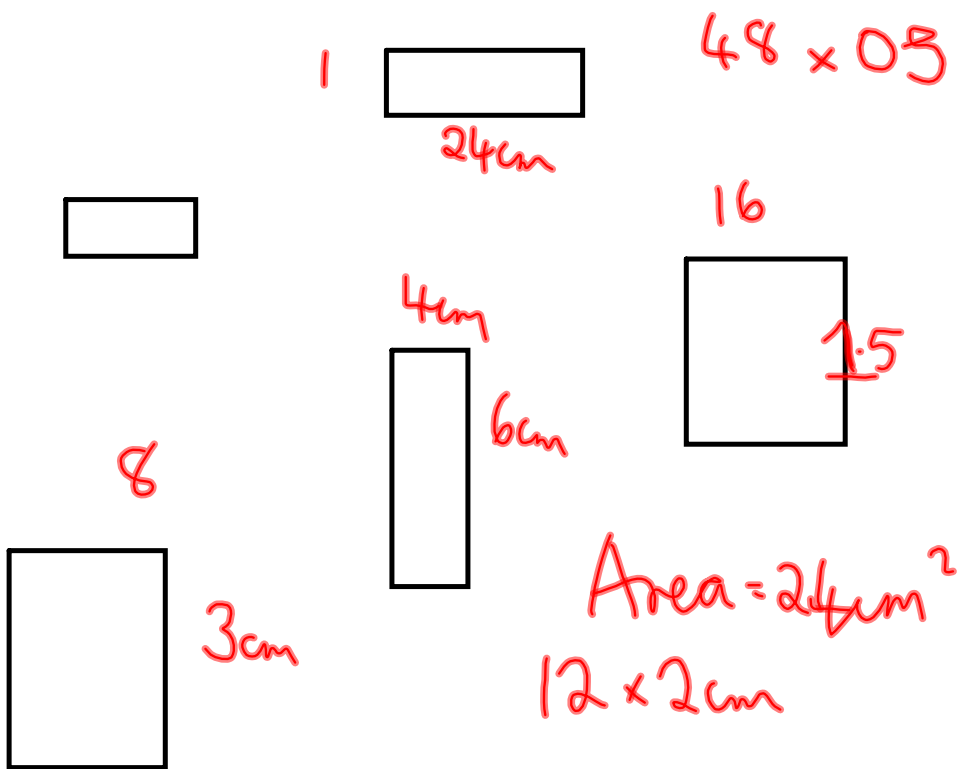


Page 252 qu 5 - 13  
A calculator will help!

True or false?

The number for the area of a rectangle is never equal to the number for the perimeter of a rectangle.





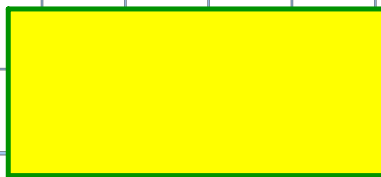
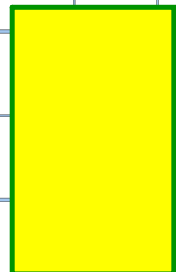
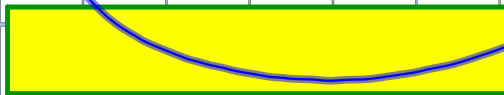
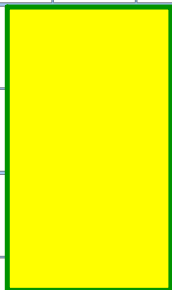
# Homework

1. Page 76 qu 1 parts 1-4

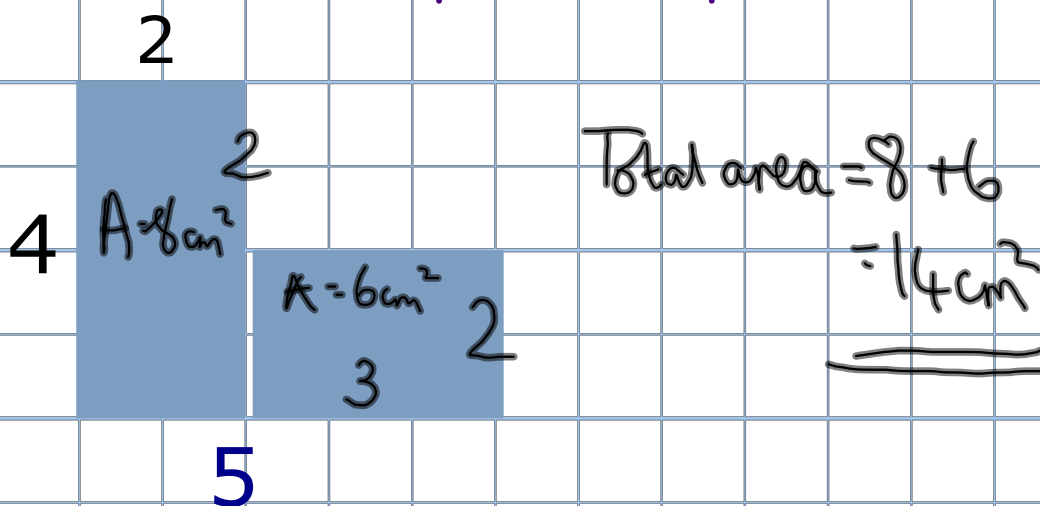
2. Draw 5 rectangles with area  $40\text{cm}^2$   
(not to scale)

3. Draw 5 shapes with perimeter of 40cm  
(not to scale)

For Tuesday



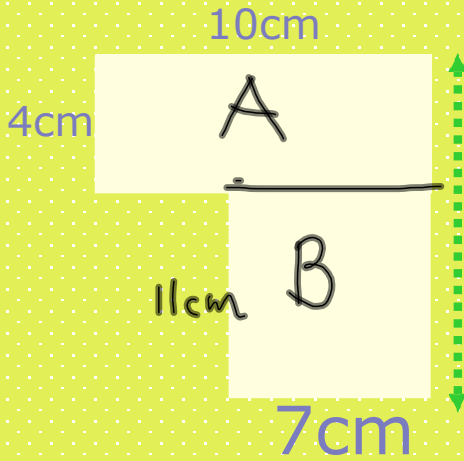
## Area of compound shapes



Make up a shape from rectangles with area  $20\text{cm}^2$ .

Ask a friend to check it.

In your book draw a shape made up of rectangles with area  $20\text{cm}^2$ .



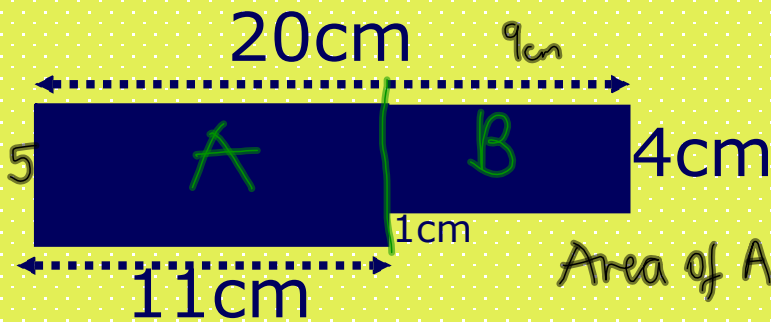
Area of A =  $10 \times 4 = 40$

15cm

Area of B =  $11 \times 7 = 77$

Total area =  $\overline{117}$   
cm<sup>2</sup>

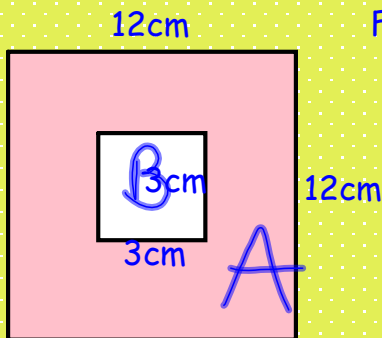
Area of Compound Shapes



Area of A =  $5 \times 11 = 55$

Area of B =  $4 \times 9 = 36$

Total Area =  $91 \text{ cm}^2$



Find the area of the pink section

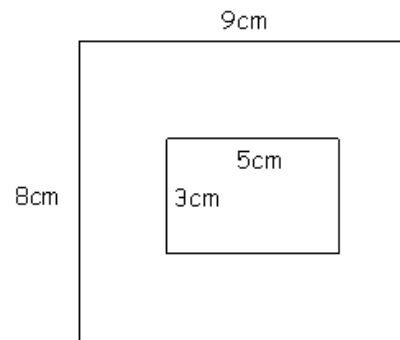
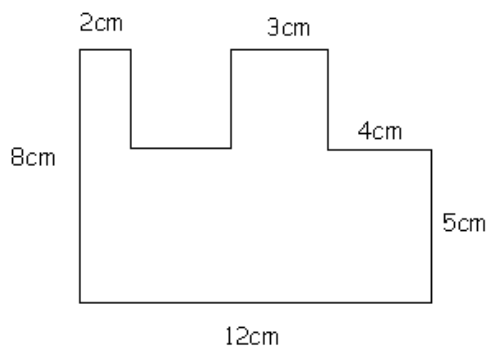
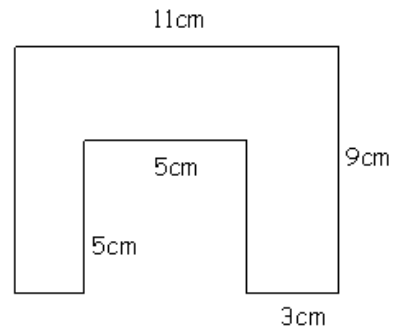
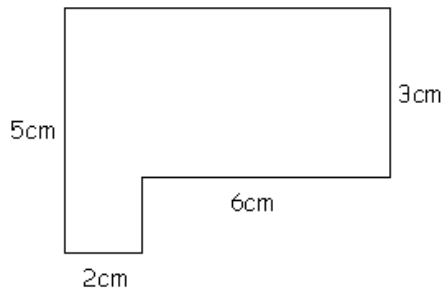
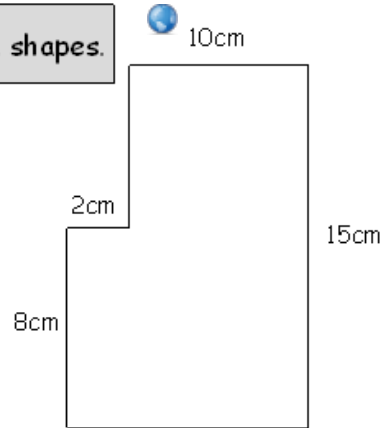
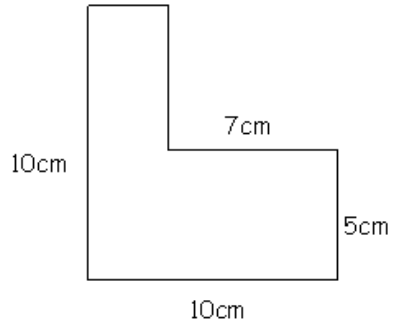
Area of A =  $12 \times 12 = 144$

Area of B =  $3 \times 3 = 9$

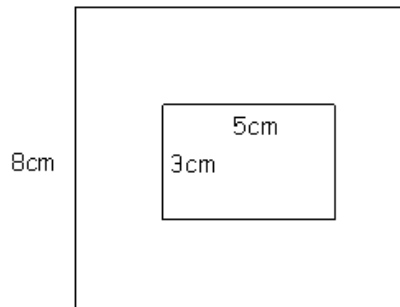
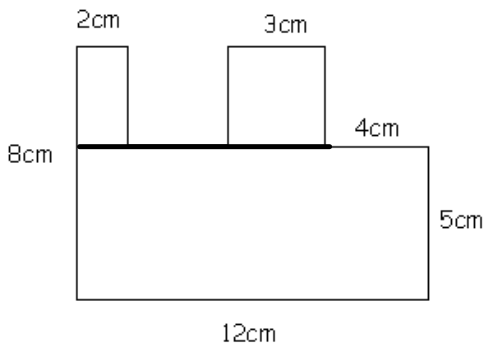
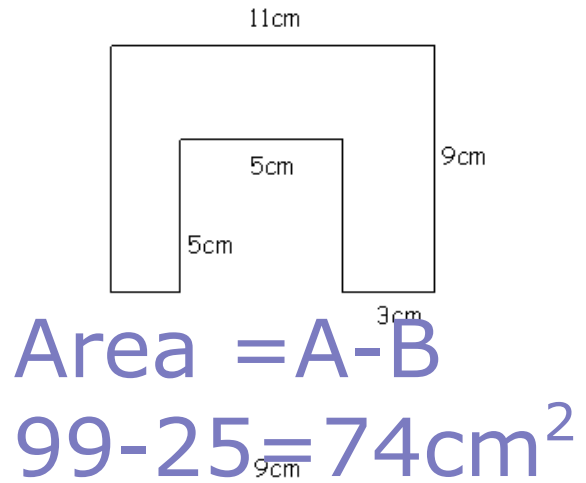
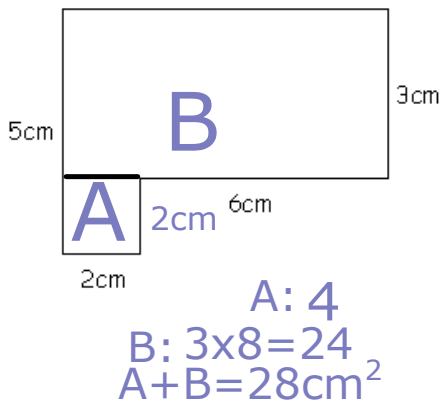
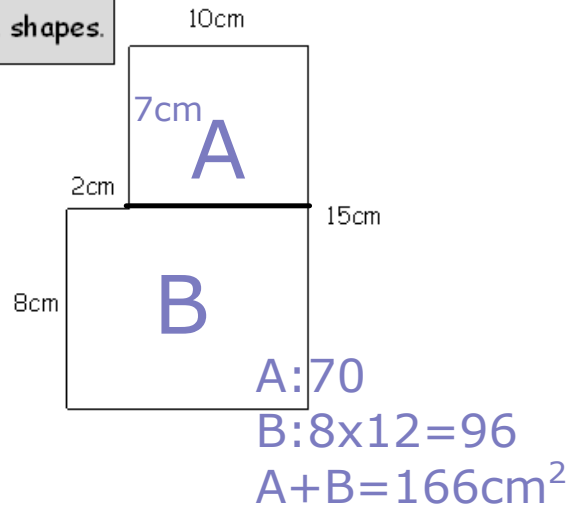
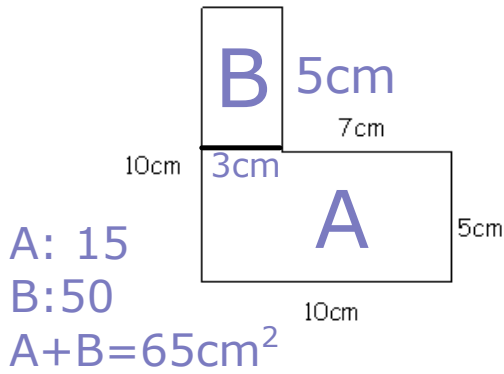
Total area =  $144 - 9$   
 $= 135 \text{ cm}^2$

## area of rectangles

To calculate the area/perimeter of compound shapes.



To calculate the area/perimeter of compound shapes.



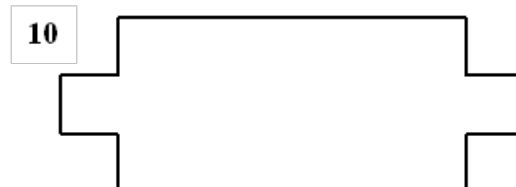
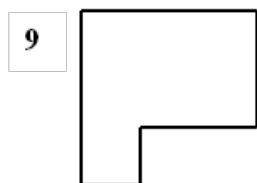
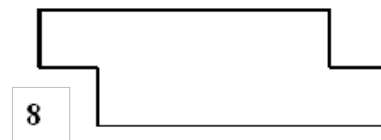
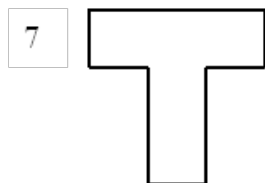
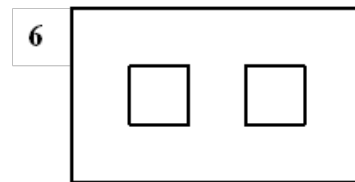
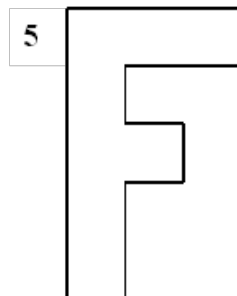
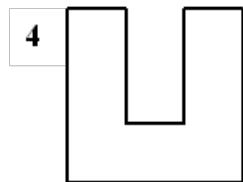
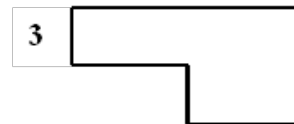
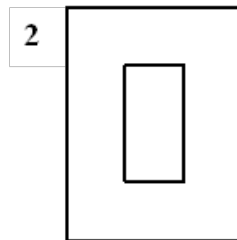
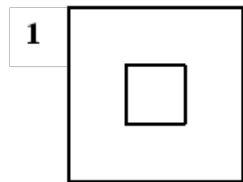
Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Area : Compound Shapes Measuring Edges 1**

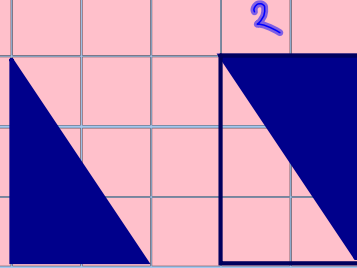
Measure the edges of the shapes below, split them into rectangles if you need to. Label the edges, then use your answers to calculate the area of each shape in  $\text{cm}^2$ .

Enter your answer in the space provided.

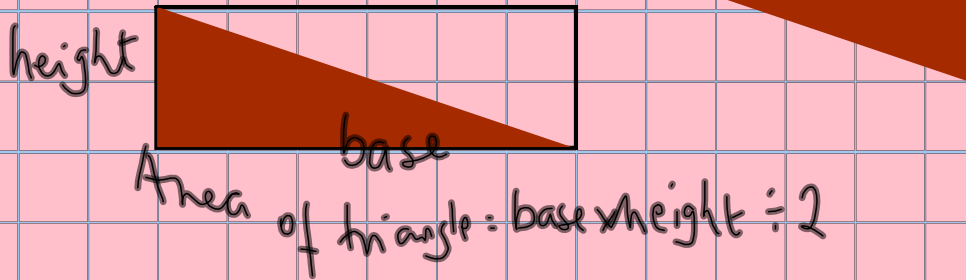
Shape Number	1	2	3	4	5	6	7	8	9	10
Area of Shape										



## Area of Triangles

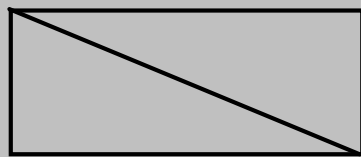


$$A_R = 6\text{cm}^2$$
$$\text{Area of triangle} = 3\text{cm}^2$$



area of triangle = area of a rectangle

Cut a piece of paper in half.  
Take one half and fold it carefully in half.  
Draw and then cut out a rectangle. Stick one rectangle in your book. Write down its area.  
Cut the other rectangle in half along a diagonal.

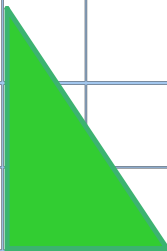


Stick the 2 triangles in your book and write down the area of one triangle.

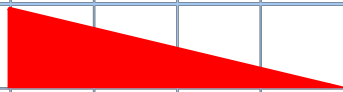
Using the other half of your page do the same thing again, but use a different size rectangle.

## Finding The Area of Triangles

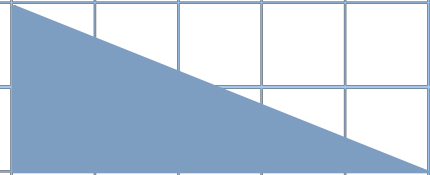
Area of a triangle =



$$\begin{aligned} \text{Area} &= \\ 2 \times 3 \div 2 \\ &= 3 \text{ cm}^2 \end{aligned}$$



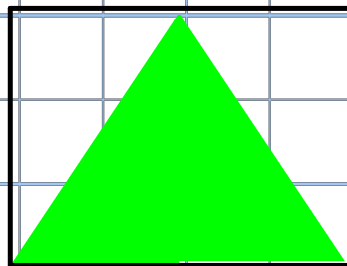
$$\begin{aligned} \text{Area} &= \\ \frac{1}{2} \times 4 \times 1 &= 2 \text{ cm}^2 \end{aligned}$$



$$\begin{aligned} \text{Area} &= \frac{1}{2} \times 5 \times 2 \\ &= 5 \text{ cm}^2 \end{aligned}$$

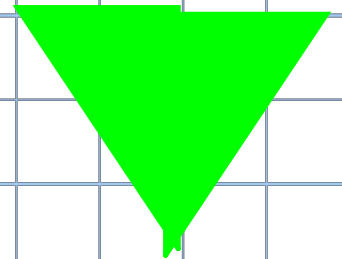
Worksheet

What about triangles without right angles?



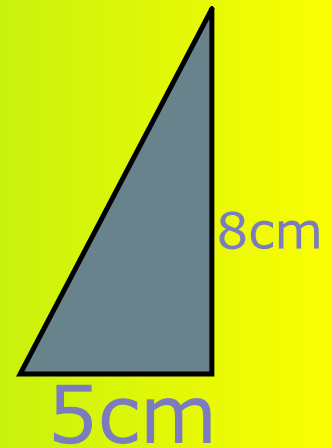
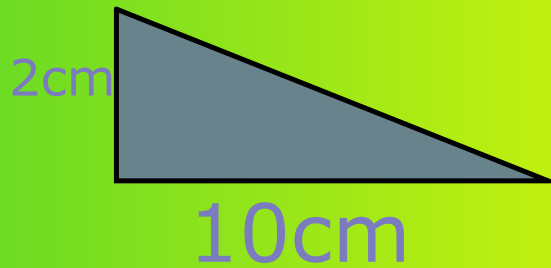
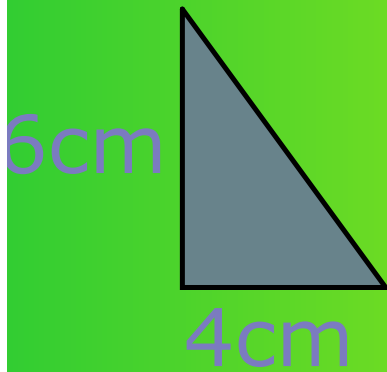
base

height

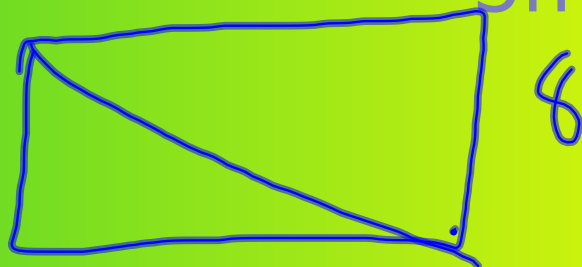
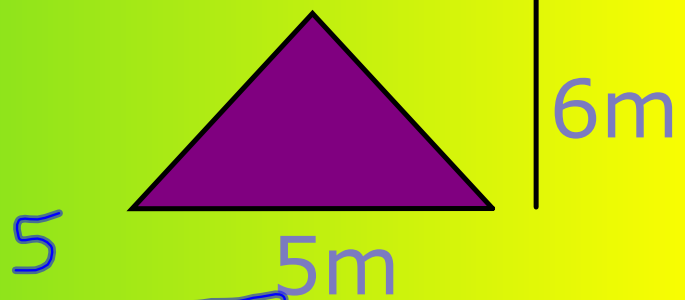
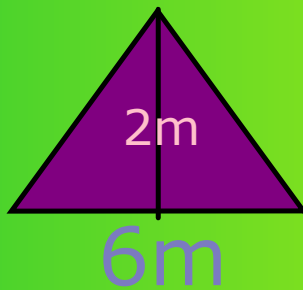


Page 254

## Area of triangles



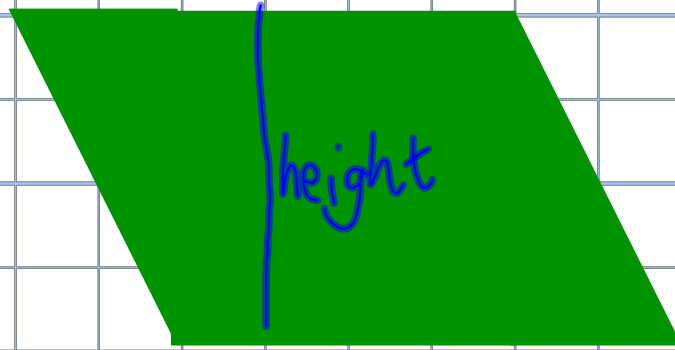
$$\begin{aligned}\text{Area} &= (b \times h) \div 2 \\ &= 4 \times 6 \div 2 \\ &= 12\text{cm}^2\end{aligned}$$



Can you sketch a triangle with area of  $20\text{cm}^2$ ?  
Ask a friend to check it.

### Area of Parallelograms

Area of parallelogram = base  $\times$  height



On folded, squared paper make a rectangle.

Find its area.

Write the area inside the shape. Stick it in your book.

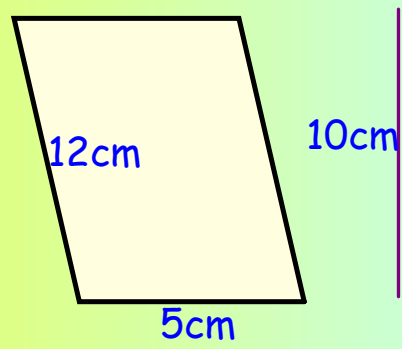
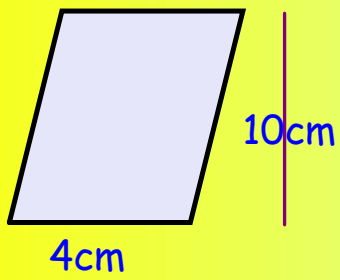
Make the other rectangle into a parallelogram.

Write the area inside the shape. Stick it in your book.

p 254

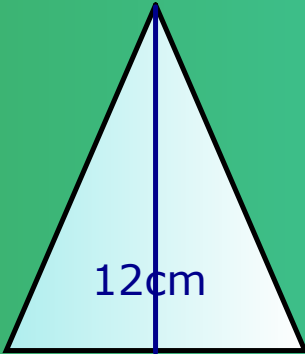
12:3 pm 1-10

Area of Parallelograms



page 254 qu 7-10

# Find the area of each shape



10cm



2cm

15cm

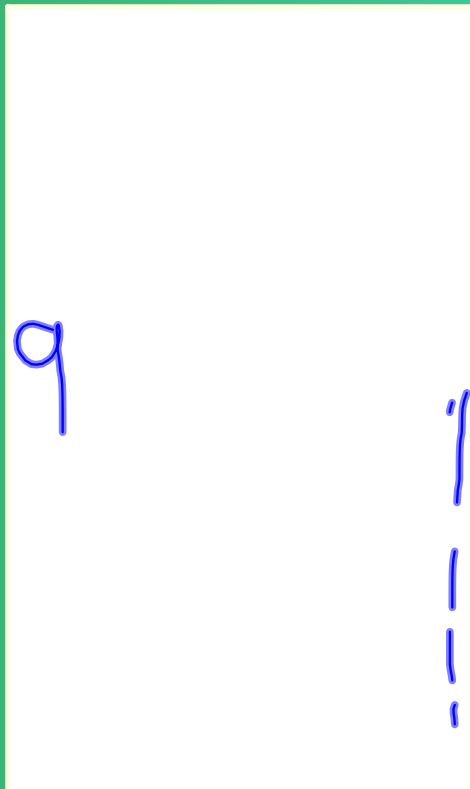


2cm

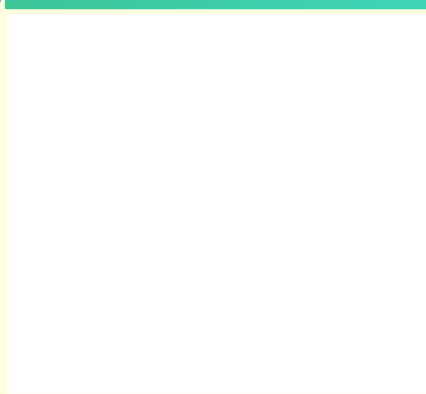
6cm

3cm

4cm



9



6cm

10cm

order cards

True or  
false?

The surface  
area of a cuboid  
is 6x the area of  
one face.

*One kilometre is less than one mile.*

If you work out the area and  
perimeter of a rectangle, the  
number for the area is always  
greater than the number for the  
perimeter.

$1000\text{cm}^3 = 1 \text{ litre}$

## Attachments

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metric and imp units.ppt

area\_compound\_shapes.odt