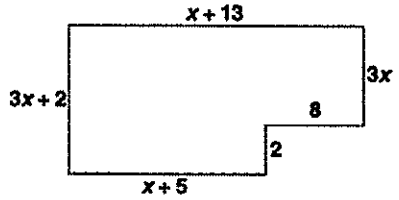
AREA AND PERIMETER

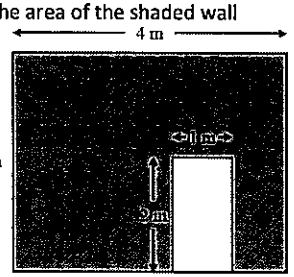
NAME _____

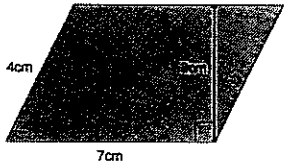
Find the area and perimeter



The diagram shows a wall with a door in it.

Find the area of the shaded wall





Here is a rectangle.

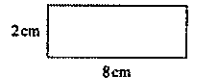


Diagram NOT accurately drawn

The 8-sided shape below is made from 4 of these rectangles and 4 congruent right-angled triangles.

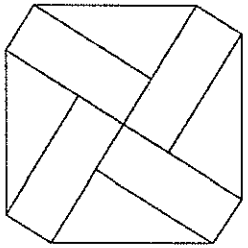
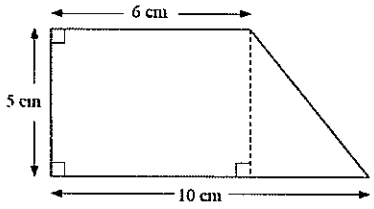


Diagram NOT accurately drawn

Work out the perimeter of the 8-sided shape.
You must show all your working.

Here is a trapezium.



Area of a rectangle

= _____

Area of a Parallelogram

= _____

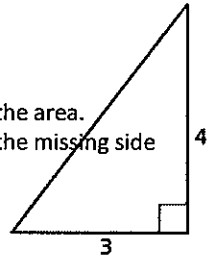
Area of a trapezium

= _____

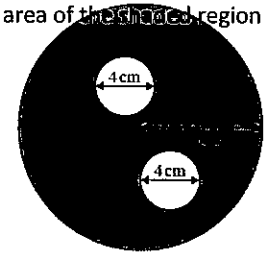
Area of a Triangle

= _____

a) Find the area.
b) Find the missing side



Find the area of the shaded region



Area of a circle

= _____

Circumference

= _____

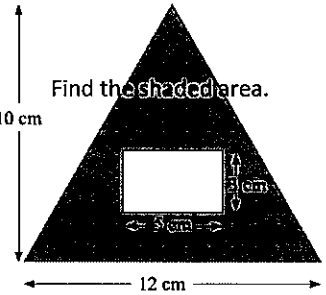
Area of a sector

= _____

Arc length

= _____

Find the shaded area.



Find the shaded area.

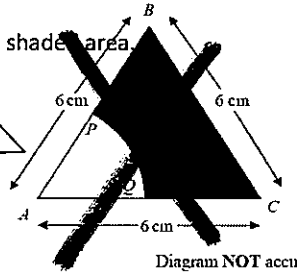


Diagram NOT accurately drawn

The top of a table is a circle.
The radius of the top of the table is 50 cm.

Find the area and circumference of the top of the table.

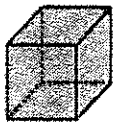
Find the radius of a circle with circumference 98cm

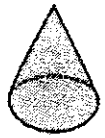
Find the area of the sector.
Find the perimeter of this sector.

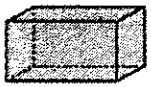
The diagram shows an equilateral triangle ABC with sides of length 6 cm.

P is the midpoint of AB.
Q is the midpoint of AC.
APQ is a sector of a circle, centre A.

Date: *L.O. To identify nets of 3D shapes.*



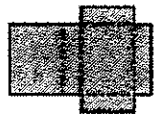




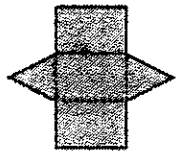
Name of shape	*What shapes are the faces?*	*Which net?*
Triangular prism	2 triangles, 3 rectangles	C

A

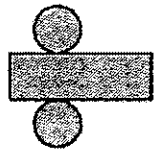
B



C

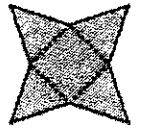


D

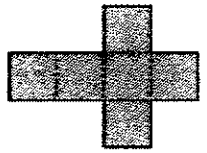


E

F



G



Area and Perimeter Revision Set 1

2016

204 Converting Units of Linear Measurement

1. Convert these lengths into the units in brackets

   (a) 10 km (metres)
   (b) 200 cm (metres)
   (c) 3 metres (millimetres)
   (d) 30 000 grams (kilograms)

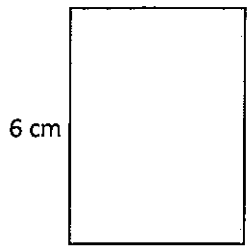
205 Perimeter

2. Here are five possible definitions of the word perimeter. Which ones are correct?

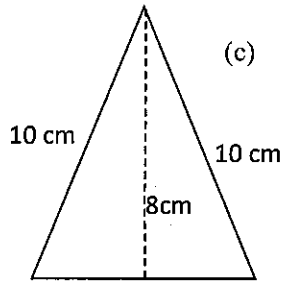
   (a) The amount of space within a shape
   (b) The distance around a shape
   (c) Add up all the numbers around the shape
   (d) The base multiplied by the height
   (e) How far you would have to walk if you walked around the shape

3. Find the perimeter of each shape:

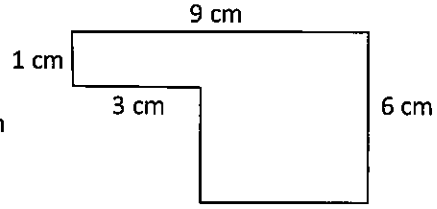
(a)



(b)



(c)

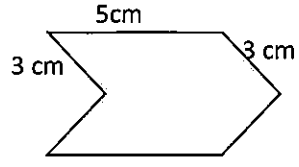


4. (a) What is the perimeter of a regular octagon where each side is 12 mm long?

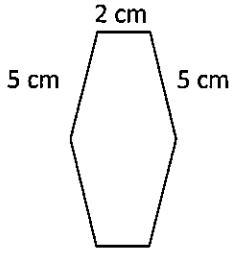
   (b) Give your answer in cm.

5. Both of the shapes below are symmetrical. Which one has a larger perimeter?

(a)

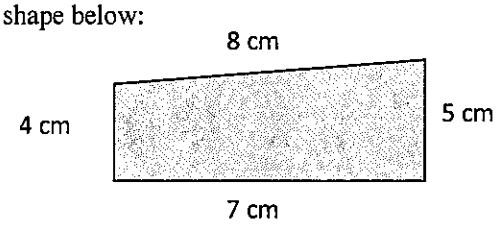


(b)

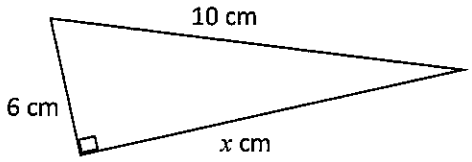


6. (a)(b)(c) Find the area of each shape in Question 7.

7. Find the area of the shape below:



8. This triangle has an area of 24 cm^2
   Find the value of x



Area and Perimeter Revision Set 2

2016

204 Converting Units of Linear Measurement

1. Convert these lengths into the units in brackets

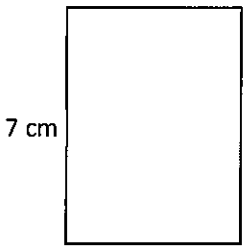
   (a) 200 cm (metres)
   (b) 5 km (metres)
   (c) 5 kilograms (grams)
   (d) 30 metres (centimetres)

2. [EXTENSION]
   (a) 50 cm (metres)
   (b) 20 grams (kilograms)
   (c) 3 centimetres (kilometres)
   (d) 2.4 millimetres (kilometres)

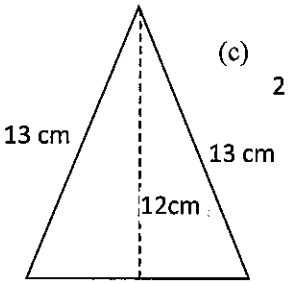
205 Perimeter

3. Find the perimeter of each shape:

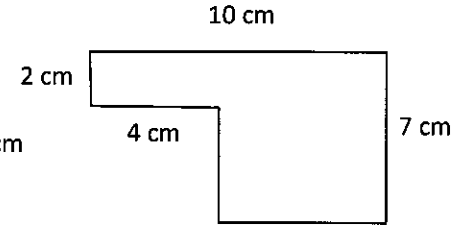
(a)



(b)



(c)

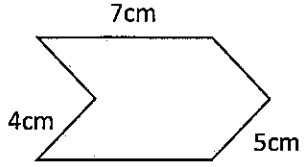


4. (a) What is the perimeter of a regular hexagon where each side is 15 mm long?

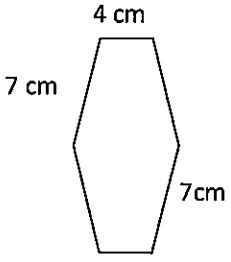
   (b) Give your answer in cm.

5. Both of the shapes below are symmetrical. Which one has a larger perimeter?

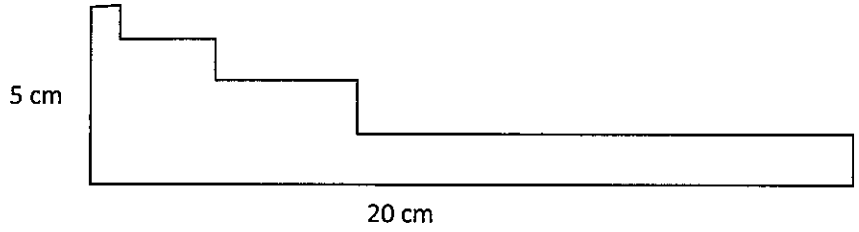
(a)



(b)



6. [EXTENSION]
   (a) Find the perimeter of this shape (without measuring it)

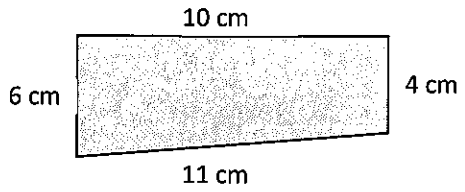


   (b) A shape is **equable** if the area is the same number as the perimeter.
   Find an equable square and an equable rectangle.

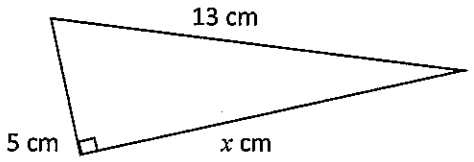
206 Area

7. (a)(b)(c) Find the area of each shape in Question 7.

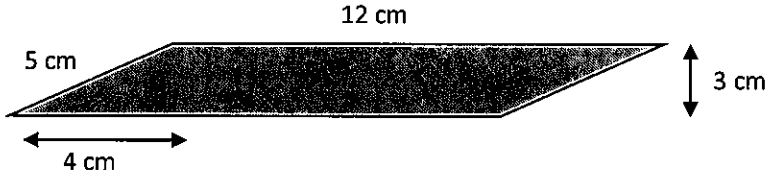
8. Find the area of the shape below:



9. This triangle has an area of 30 cm^2
   Find the value of x



10. [EXTENSION]
    (a) Find the area of this parallelogram



    (b) Find a general formula for the area of any parallelogram