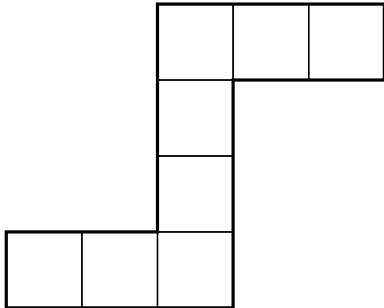


Year 7 Questions - Area & Perimeter.

Level 3 to 5 Questions.

1. A shape is made of 1 cm squares.



(a) Work out the perimeter of the shape.

Answer cm

(1)

(b) Work out the area of the shape.

Answer cm²

(1)

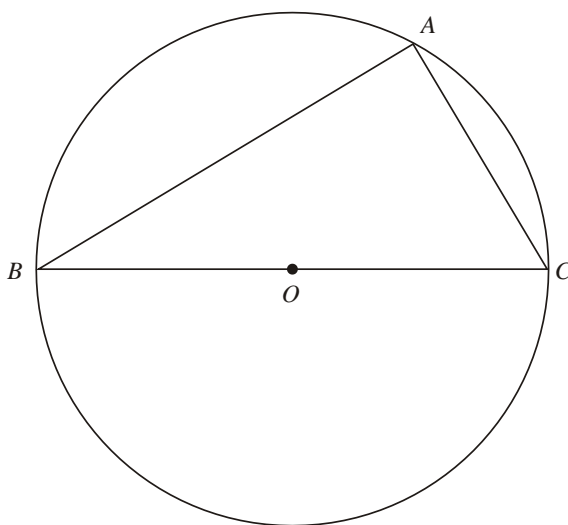
(c) Write down the order of rotational symmetry of the shape.

Answer

(1)

(Total 3 marks)

2. Triangle ABC is drawn inside a circle with centre O .



(a) Measure the length of the radius of the circle.

Answer cm

(1)

(b) Measure the size of angle BAC .

Answer degrees

(1)

(c) Mark point P on the circumference of the circle so that AP is a diameter.

(2)

(Total 4 marks)

3. (a) A circular dinner plate has a radius of 13 cm.

Calculate the area of the plate.

.....

Answer cm^2

(3)

(b) A smaller circular plate has a diameter of 14 cm.

Calculate the circumference of the plate.

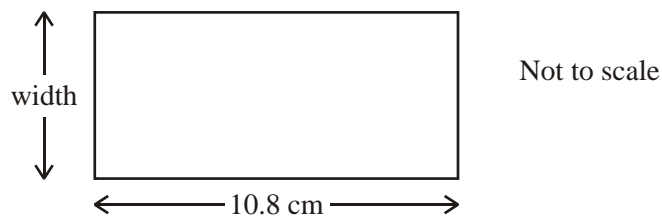
.....

Answer cm

(2)

(Total 5 marks)

4. The length of a rectangle is 10.8 cm.
 The perimeter of the rectangle is 28.8 cm.



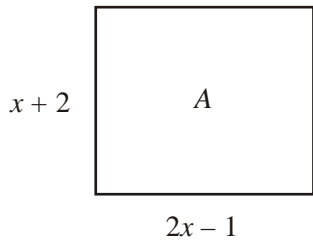
Calculate the width of the rectangle.

.....

Answer cm

(Total 3 marks)

5. Rectangle A has length $(2x - 1)$ cm and width $(x + 2)$ cm.



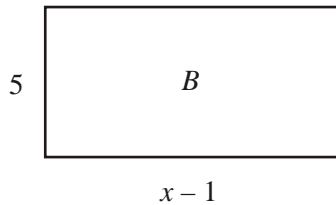
Not drawn accurately

(a) Show that the perimeter of rectangle A is $(6x + 2)$ cm.

.....

(1)

(b) Rectangle B has length $(x - 1)$ cm and width 5 cm.



Not drawn accurately

The perimeter of rectangle A is equal to the perimeter of rectangle B .
 Write down and solve an equation in x .

.....

Answer $x =$

(4)

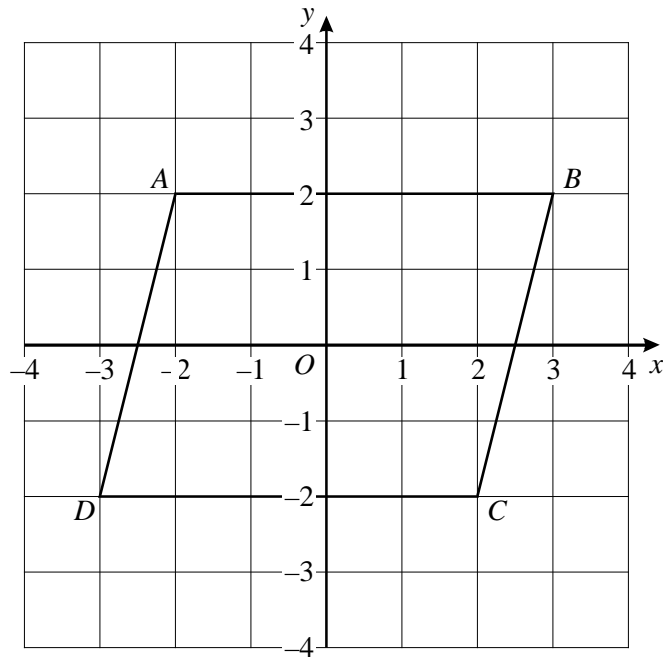
(c) Find the **area** of rectangle A .

.....

Answer cm^2

(2)

6. The parallelogram $ABCD$ is drawn on a centimetre square grid.



(a) The coordinates of A are $(-2, 2)$.

Write down the coordinates of B , C and D .

Answer B (.....,))

C (.....,))

D (.....,))

(2)

(b) Emma says that the perimeter of the parallelogram is more than 18 cm.
Explain why Emma is correct.

.....

(1)

(c) Calculate the area of the parallelogram.

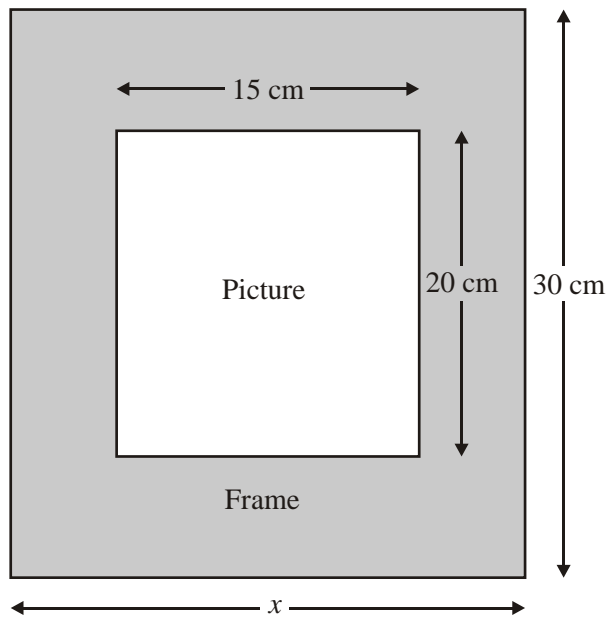
.....

Answer cm^2

(2)

(Total 5 marks)

7. The diagram shows a rectangular picture with a frame around it.
 The frame is the same width all the way round.
 The picture is 15 cm wide and 20 cm high.
 The total height of the picture **and** frame is 30 cm.



Not drawn accurately

- (a) Work out the width x , shown on the diagram.

.....

Answer cm

(3)

- (b) Work out the area of the frame.
 State the units of your answer.

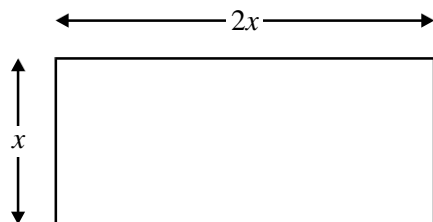
.....

Answer

(4)

(Total 7 marks)

8. The length of a rectangle is twice its width.



Not to scale

The area of the rectangle is 50 cm^2 .

(a) Show that the length of the rectangle is 10 cm.

.....
.....

(1)

(b) Work out the perimeter of the rectangle.

.....

Answer cm

(1)

(Total 2 marks)