Chapter 10: Area & Perimeter

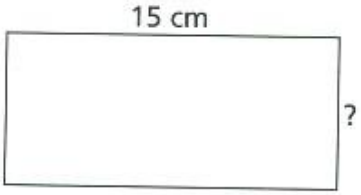
Level 1

Exercise 1

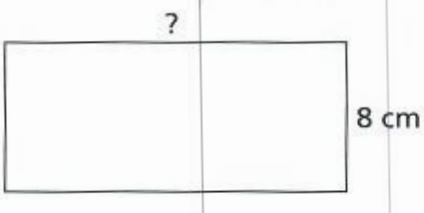
1. The perimeter of a square is 28 cm. Find the length of one side of the square.

2. A wire 100 m long is bent to form a square. What is the length of one side of the square?

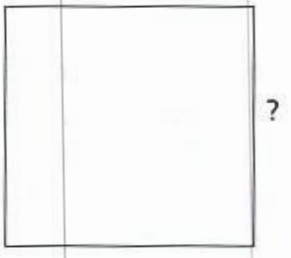
3. The perimeter of a rectangle is 48 cm. Its length is 15 cm. Find its breadth.



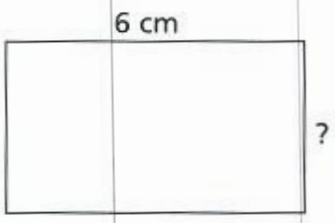
4. The perimeter of a rectangle is 50 cm. Its breadth is 8 cm. Find its length.



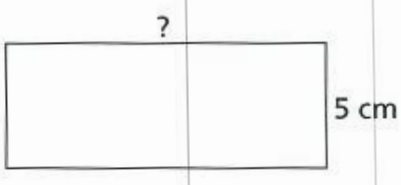
5. The area of a square field is 49 m^2. Find the length of one side of the field.



6. The area of a rectangle is 24 cm^2. Its length is 6 cm. Find its breadth.



7. The area of a rectangle is 65 cm^2. Its breadth is 5 cm. Find its length.



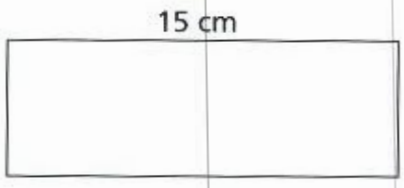
8. The area of a square tile is 100 cm^2. Find the length of one side of the tile.

9. The perimeter of a square is 36 cm.
   (a) Find the length of one side of the square.
   (b) Find its area.

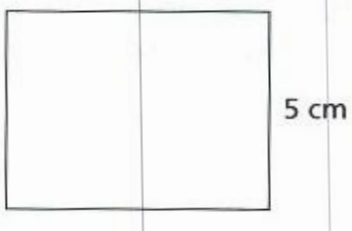
10. The area of a square is 36 cm^2.
   (a) Find the length of one side of the square.
   (b) Find its perimeter.

Exercise 2

1. The perimeter of a rectangle is 40 cm. Its length is 15 cm.
   (a) Find its breadth.
   (b) Find its area.



2. The area of a rectangle is 40 cm^2. Its breadth is 5 cm.
   (a) Find its length.
   (b) Find its perimeter.



3. The area of a square is 64 cm^2. Find its perimeter.

4. The perimeter of a square is 64 cm. Find its area.

5. The perimeter of a rectangle is 24 m. Its length is 8 m. Find its area.

6. The area of a rectangle is 24 cm^2. Its length is 8 cm. Find its perimeter.

7. The area of a rectangle is 50 cm^2. Its length is 10 cm. Find its perimeter.

8. The perimeter of a rectangle is 50 cm. Its breadth is 10 cm. Find its area.

9. The perimeter of a rectangle is 48 cm. Its length is twice as long as its breadth.
   (a) Find both the length and breadth of the rectangle.
   (b) Find its area.

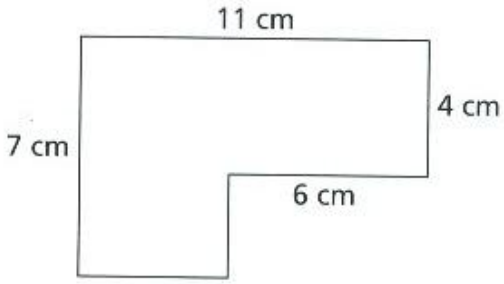
10. The perimeter of a rectangle is 48 cm. Its breadth is $\frac{1}{3}$ as long as its length.
   (a) Find both the length and breadth of the rectangle.
   (b) Find its area.

Level 2

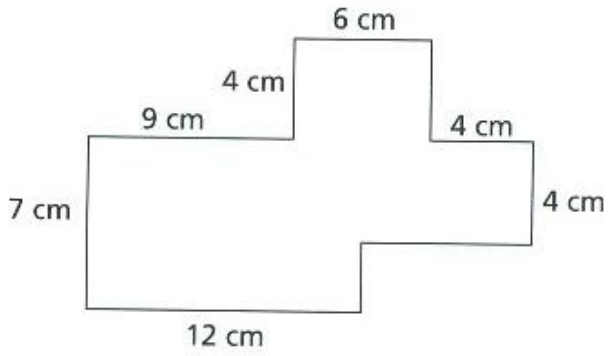
Exercise 1

All angles in the figures are right angles.

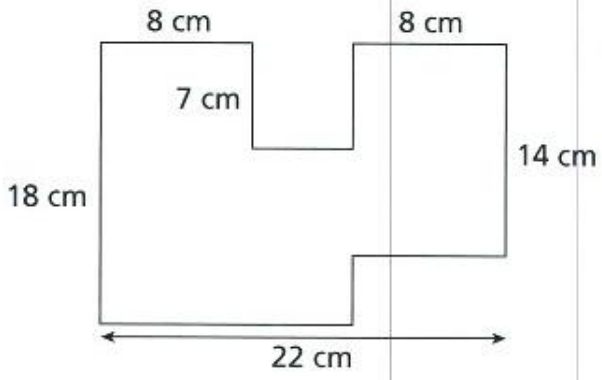
1. Find the perimeter of the figure.



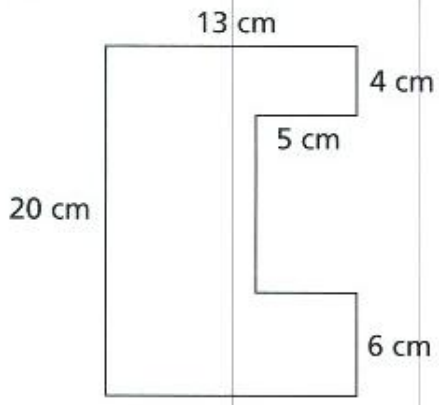
2. Find the perimeter of the figure.



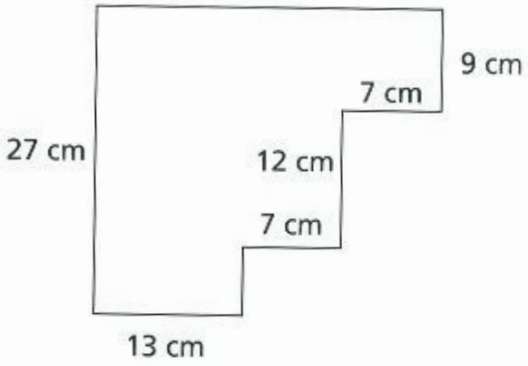
3. Find the perimeter of the figure.



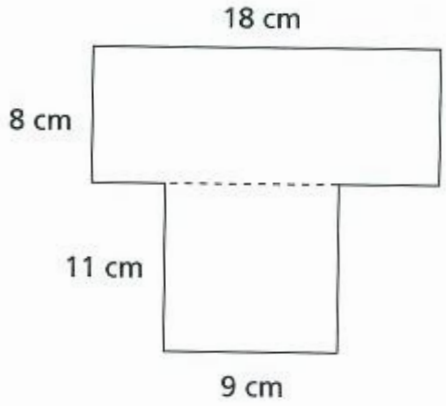
4. Find the perimeter of the figure.



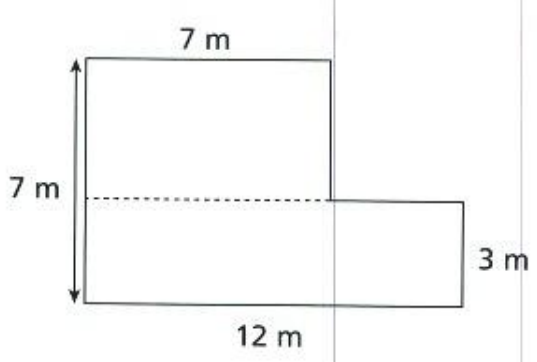
5. Find the perimeter of the figure.



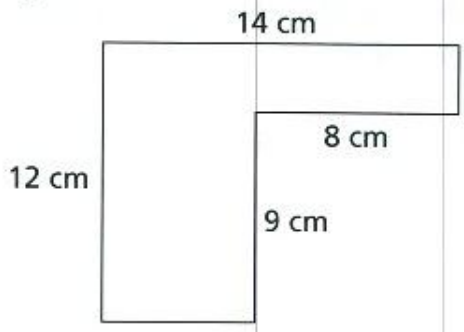
6. Find the area of the figure.



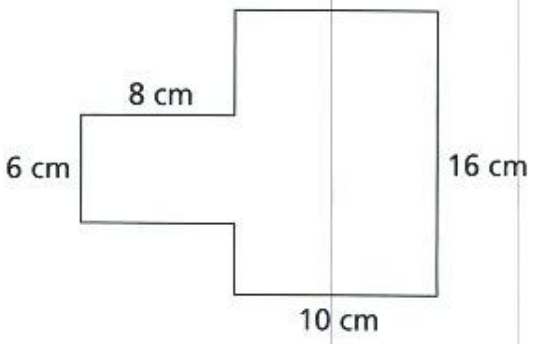
7. Find the area of the figure.



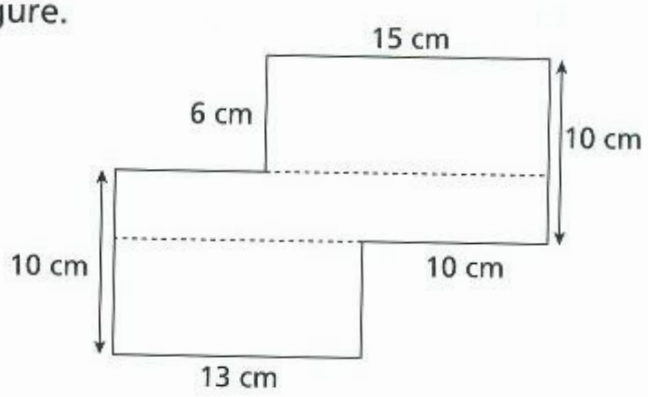
8. Draw dotted lines to divide the figure into rectangles and/or squares. Then find the area of the figure.



9. Draw dotted lines to divide the figure into rectangles and/or squares. Then find the area of the figure.



10. Find the area of the figure.



Exercise 2

Choose the correct answer and write its number in the brackets provided.

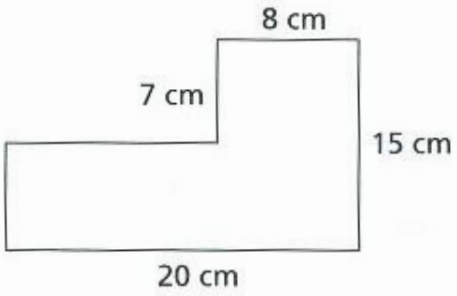
1. The perimeter of a square is 4 cm. The area of the square is _____ cm^2.
   (1) 1 (2) 2
   (3) 16 (4) 4 ( )

2. The area of a square is 4 cm^2. The perimeter of the square is _____ cm.
   (1) 64 (2) 16
   (3) 8 (4) 4 ( )

3. The area of a rectangle is 16 cm^2. The length is 8 cm. Its perimeter is _____ cm.
   (1) 48 (2) 24
   (3) 20 (4) 10 ( )

4. The perimeter of a rectangle is 100 cm. Its breadth is 10 cm. Its area is _____ cm^2.
   (1) 40 (2) 80
   (3) 100 (4) 400 ( )

Jse the figure below to answer questions 5 and 6.



5. The perimeter of the figure is _____ cm.
   (1) 50 (2) 58
   (3) 62 (4) 70 ( )

6. The area of the figure is _____ cm^2.
   (1) 216 (2) 244
   (3) 260 (4) 300 ( )

7. The perimeter of a rectangle is 72 cm. Its length is twice as long as its breadth. Find its breadth.
   (1) 8 cm (2) 12 cm
   (3) 24 cm (4) 36 cm ( )

8. The perimeter of a rectangle is 80 cm. Its breadth is $\frac{1}{4}$ as long as its length. Find its length.
   (1) 10 cm (2) 20 cm
   (3) 32 cm (4) 40 cm ( )

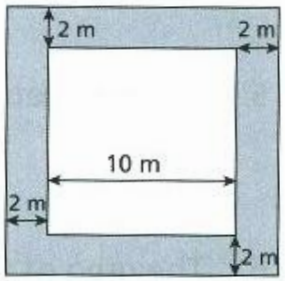
9. The perimeter of a rectangle is 40 cm. Its length is 4 cm longer than its breadth. Find its length.
   (1) 22 cm (2) 18 cm
   (3) 12 cm (4) 8 cm ( )

10. The perimeter of a rectangle is 48 cm. Its breadth is 10 cm shorter than its length. Find its breadth.
    (1) 7 cm (2) 17 cm
    (3) 19 cm (4) 29 cm ( )

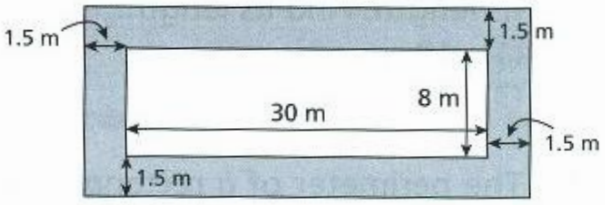
Level 3

Exercise 1

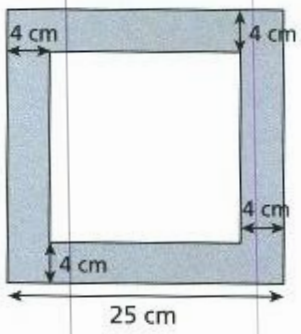
1. The figure shows a square field with a path of 2 m wide around it. Find the area of the path.



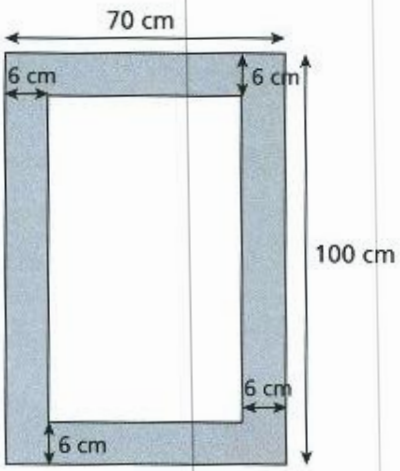
2. The figure shows a rectangular field with a path of 1.5 m wide around it. Find the area of the path.



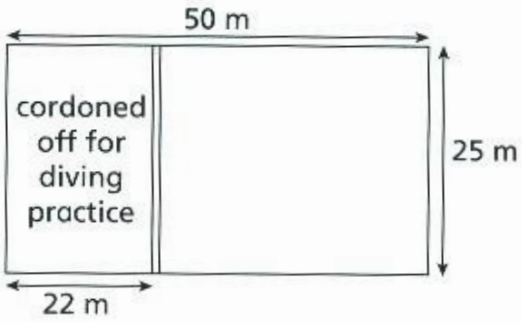
3. Sam makes a photo frame by cutting away a square inside a 25-cm square cardboard. Find the area of the remaining cardboard.



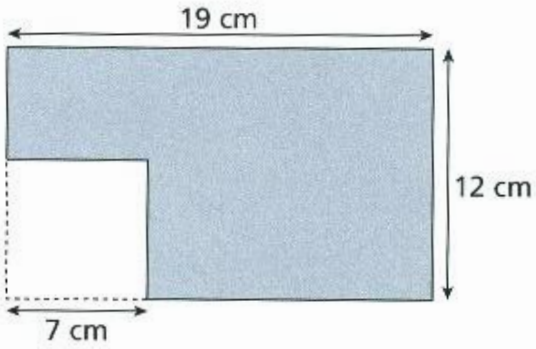
4. A rectangular towel measures 100 cm by 70 cm. It has a border 6 cm around it. What is the area of the border?



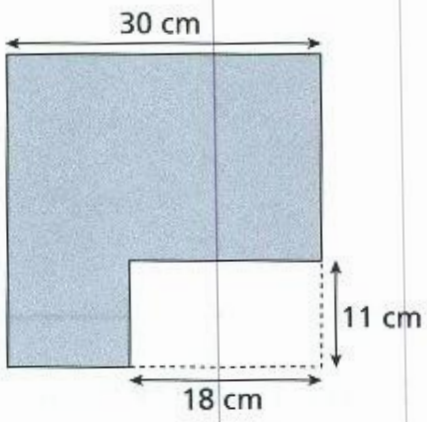
5. A swimming pool measures 50 m by 25 m. A worker puts floats to cordon off a portion of the pool for diving practices. What is the area of the remaining pool?



6. Sherman cuts away a 7-cm square at one of the corners of a sheet of paper, as shown in the figure below. Find the area of the remaining paper.

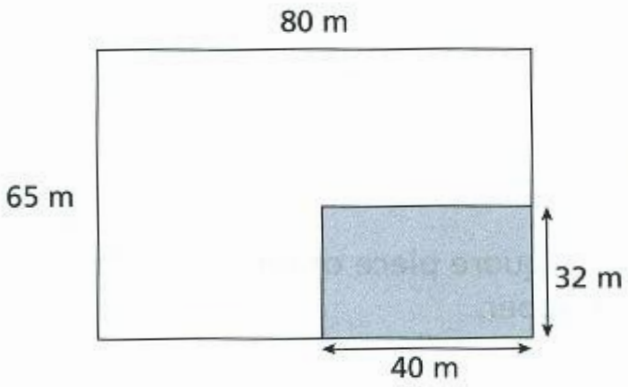


7. Maggie cuts away a rectangle at one of the corners of a sheet of 30-cm square paper, as shown in the figure below. Find the area of the remaining paper.



Use the figure below to answers questions 8 and 9.

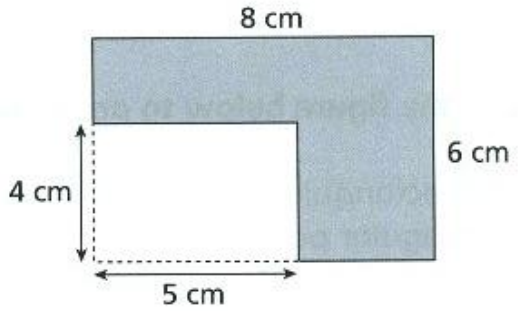
The rectangular field is 80 m long and 65 m wide. A worker cements a rectangular portion of the field to make a carpark.



8. What is the area of the remaining field?

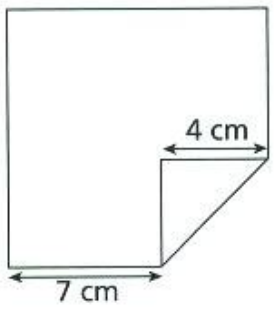
9. What is the perimeter of the remaining field?

10. A rectangle was cut away from a sheet of paper. What fraction of the paper was cut away?

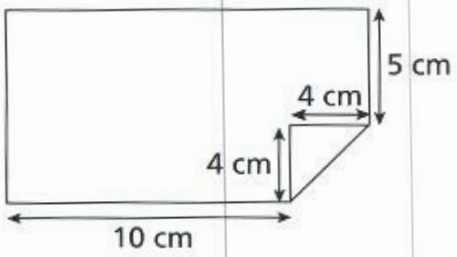


Exercise 2

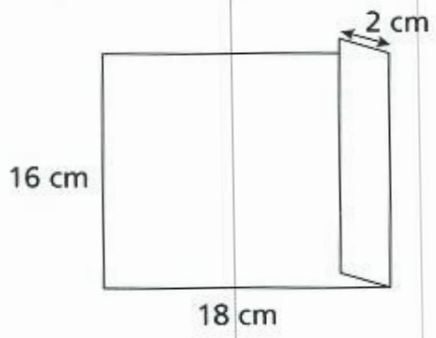
1. A corner of a square piece of paper was folded. Find the area of the piece of paper.



2. A corner of a rectangular piece of paper was folded. Find the area of the piece of paper.

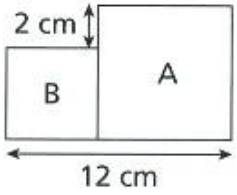


3. A sheet of paper was folded along one of the sides, as shown in the figure below. Find the area of the sheet of paper.

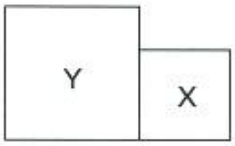


4. A sheet of square paper was folded into half, as shown in the figure below. Find the area of the sheet of paper.

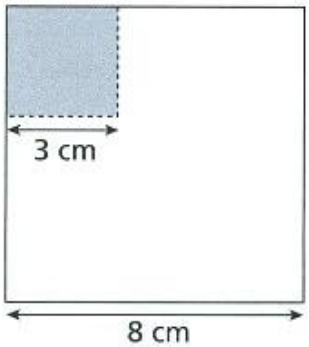
5. Two squares, A and B, were drawn beside each other. The lengt of Square A is 2 cm longer than Square B. Find the total area o the two squares.



6. Two squares, X and Y, were drawn beside each other. The total area of the two squares is 80 cm^2. Find the length of each square given that the lengths of the squares are both whole numbers.



7. What is the most number of 3-cm squares that you cut out from a square piece of paper of length 8 cm?



8. Pauline has a rectangular piece of paper of length 20 cm and breadth 15 cm. What is the most number of 4-cm squares that she can draw, without overlapping, on the paper?

9. Yenn has a piece of square paper of length 36 cm. What is the most number of 9-cm squares that she can draw, without overlapping, on the paper?

10. A school has a field of length 95 m and breadth 64 m. A P.E. teacher wants to divide the field into smaller square blocks of length 15 m for his lesson.
    (a) What is the most number of blocks he can get?
    (b) What is the area of the unused field?