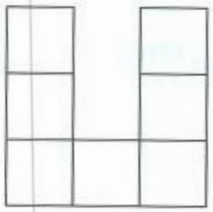
CHAPTER 13: AREA AND PERIMETER

Level 1

Exercise 1

1. Find the area of each figure in square units.

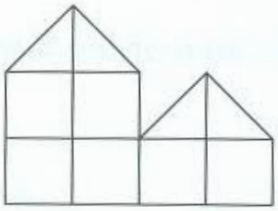
(a)



Area of the figure

= _____ square units

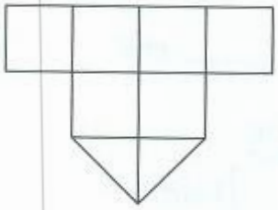
(b)



Area of the figure

= _____ square units

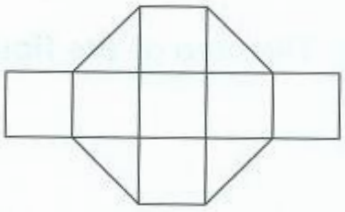
(c)



Area of the figure

= _____ square units

(d)



Area of the figure

= _____ square units

2. These figures are made of tiles.

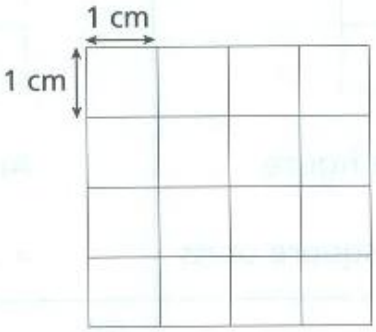
A B C

(a) Figure _____ has the greatest area.

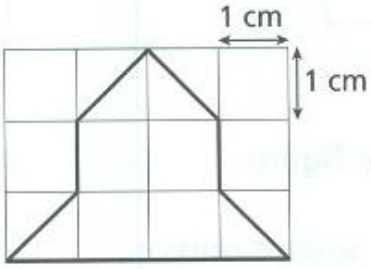
(b) Figure _____ has the smallest area.

3. The figure below is made up of _____ 1-cm squares.

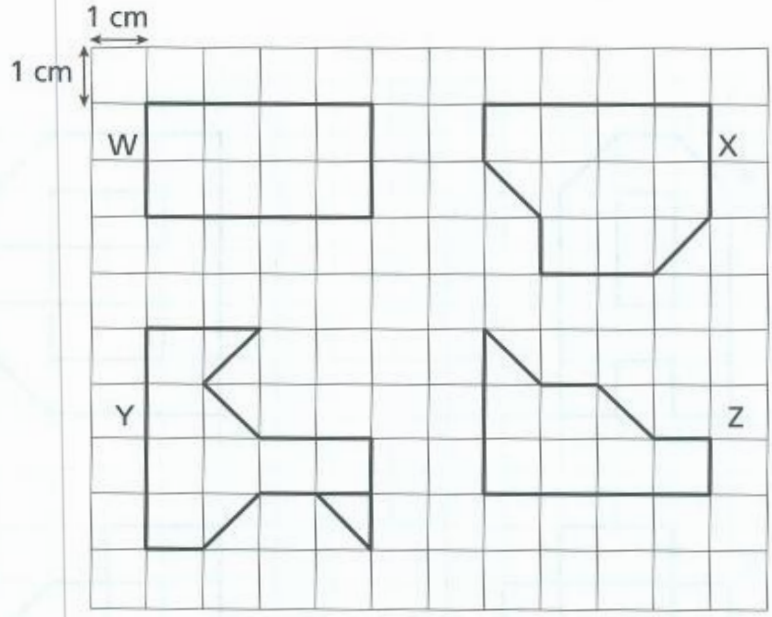
The area of the 4-cm square is _____ cm^2.



4. The area of the figure below is _____ cm^2.



Use the figures below to answer questions 5 to 7.



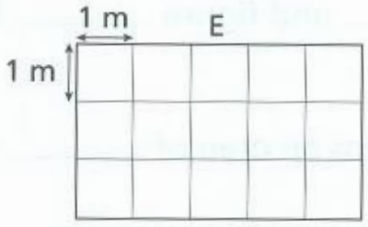
5. The area of figure Y is _____ cm^2.

6. The area of figure Z is _____ cm^2.

7. Arrange the figures in order. Begin with the figure with the smallest area.

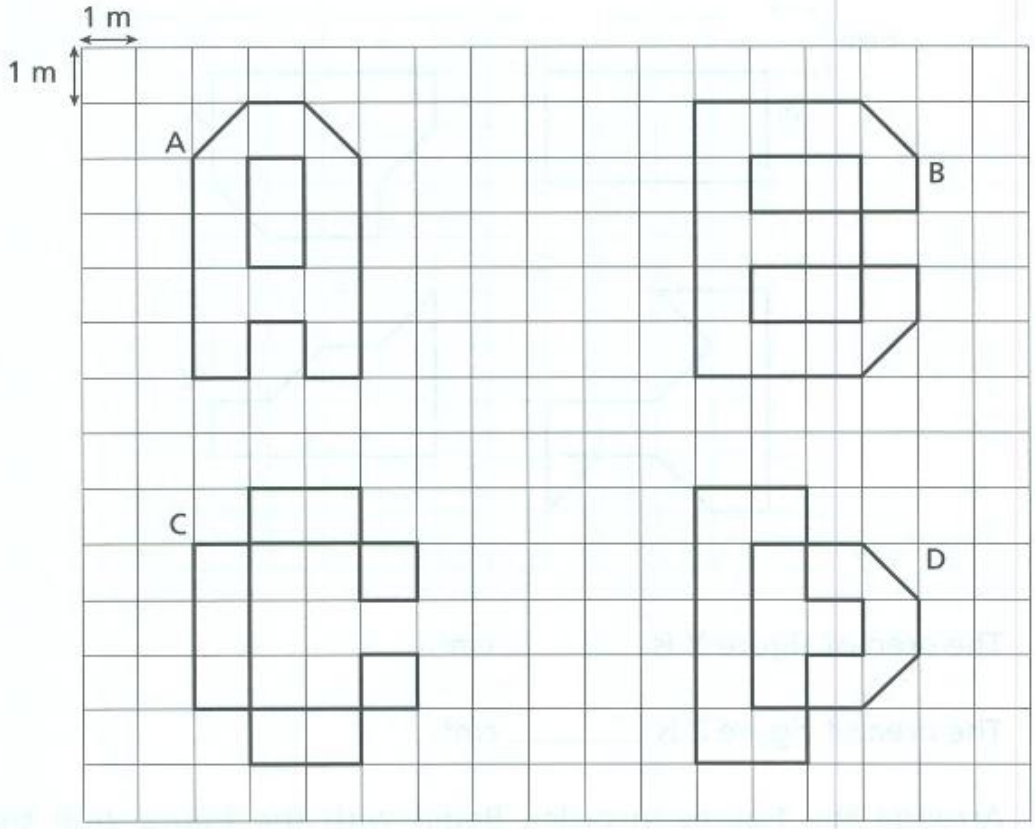
   Figure _____, figure _____, figure _____, figure _____

8. Figure E is made up of _____ 1-m squares.



The area of figure E is _____ m^2.

Use the figures below to answer questions 9 to 10.



9. (a) Figure _____ has the greatest area.

   (b) Figure _____ has the smallest area.

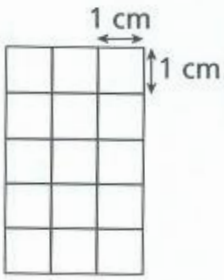
   (c) Figure _____ and figure _____ have the same area.

10. The four figures has an area of _____ m^2 altogether.

Exercise 2

1. Find the perimeter of each figure.

(a)



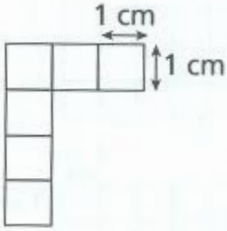
Perimeter of the figure

= _____ cm

Area of the figure

= _____ cm^2

(b)



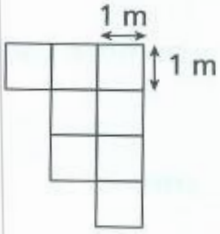
Perimeter of the figure

= _____ cm

Area of the figure

= _____ cm^2

(c)



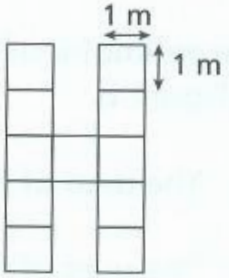
Perimeter of the figure

= _____ m

Area of the figure

= _____ m^2

(d)



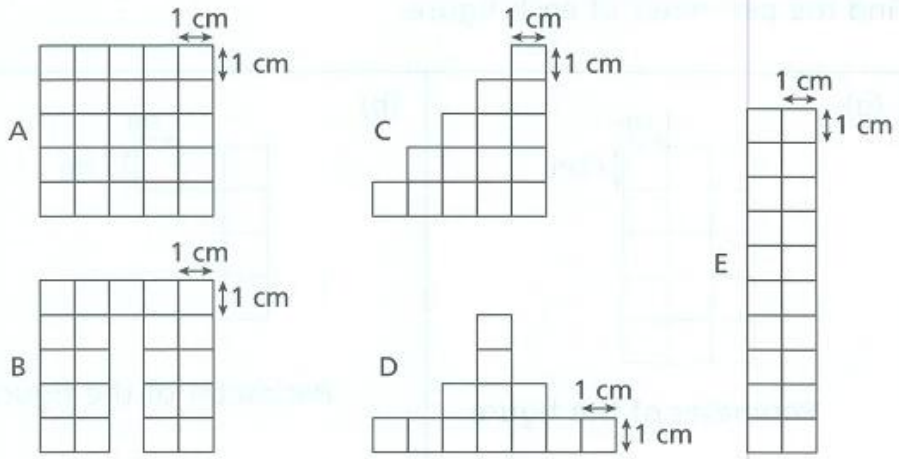
Perimeter of the figure

= _____ m

Area of the figure

= _____ m^2

Use the figures below to answer questions 2 to 10.



2. (a) The perimeter of figure A is _____ cm.

   (b) The perimeter of figure D is _____ cm.

3. The perimeter of figure B is _____ cm more than the perimeter of Figure E.

4. (a) The area of figure A is _____ cm^2.

   (b) The area of figure D is _____ cm^2.

5. The area of figure B is _____ cm^2 more than the area of figure E.

6. Figure _____ has the greatest area.

7. Figure _____ has the greatest perimeter.

8. Figure A and figure C have the same _____ but different _____.

9. Figure A has a _____ area than figure B but _____ perimeter than figure B.

10. The five figures have a total area of _____ cm^2.

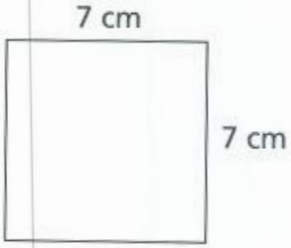
CHAPTER 13: AREA AND PERIMETER

Level 2

Exercise 1

1. Find the perimeter of the figures.

(a)



Perimeter of the 7-cm square

= _____ + _____ +

_____ + _____

= _____ cm

(b)

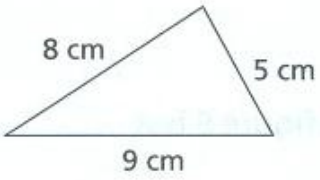
Perimeter of the rectangle

= _____ + _____ +

_____ + _____

= _____ cm

(c)



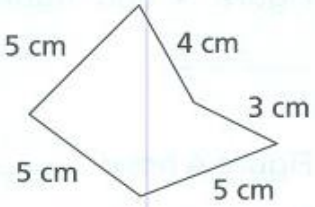
Perimeter of the triangle

= _____ + _____ +

_____

= _____ cm

(d)



Perimeter of the figure

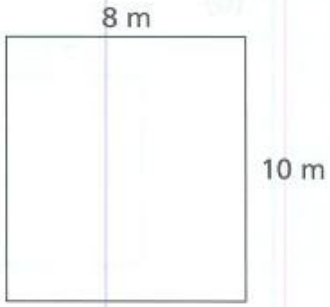
= _____ + _____ +

_____ + _____ +

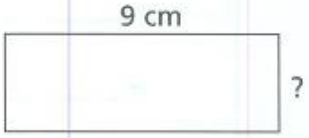
_____

= _____ cm

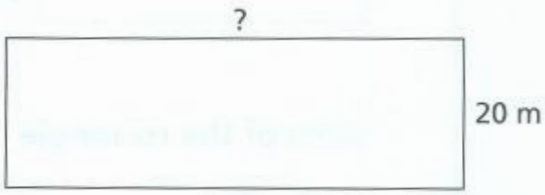
2. Mr Tan's classroom is rectangular in shape. Find the perimeter of the room.



3. The length of a rectangle is 9 cm. Its length is thrice as long as its breadth.
   (a) Find its breadth.
   (b) Find its perimeter.



4. The breadth of a rectangular field is 20 m. Its length is 4 times as long as its breadth. What is the perimeter of the field?



5. Mark ran 1 time around the perimeter of a school field. The field is shaped like a square with a length of 45 m. Find the distance that Mark ran.

6. Find the area of the figures.

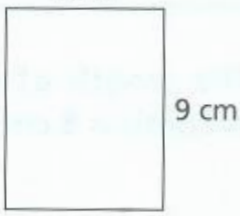
(a)

Area of the square

= _____ × _____

= _____ m^2

(b)



Area of the rectangle

= _____ × _____

= _____ cm^2

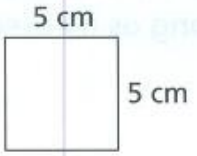
(c)

Area of the rectangle

= _____ × _____

= _____ m^2

(d)

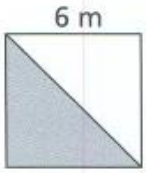


Area of the square

= _____ × _____

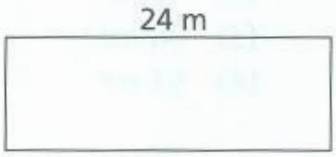
= _____ cm^2

7. Prisca drew a 6-cm square on a paper. She then coloured half the square as shown below. Find the area of the coloured portion.

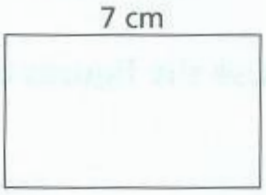


8. The length of a rectangle is twice as long as its breadth. Its breadth is 8 cm. Find the area of the rectangle.

9. A rectangular field has a length of 24 m. Its length is 3 times as long as its breadth. What is the area of the field?



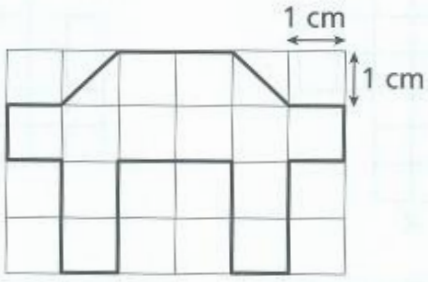
10. The length of a rectangle is 7 cm. Its length is 2 cm longer than its breadth. Find the area of the rectangle.



Exercise 2

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

1. What is the area of the figure below?



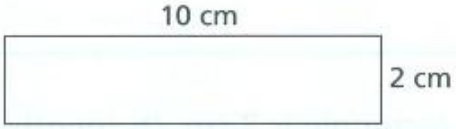
(1) 12 cm^2 (2) 13 cm^2
(3) 14 cm^2 (4) 15 cm^2 ( )

2. What is the area of the square shown?

(1) 9 m^2
(2) 18 m^2
(3) 36 m^2
(4) 81 m^2

( )

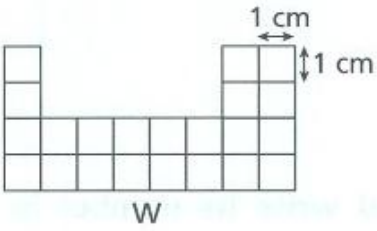
3. What is the perimeter of the rectangle below?

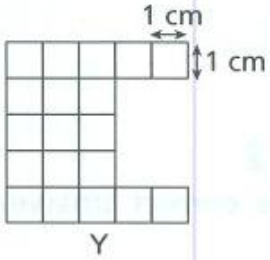


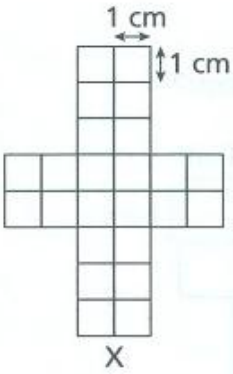
(1) 24 cm
(2) 20 cm
(3) 12 cm
(4) 8 cm

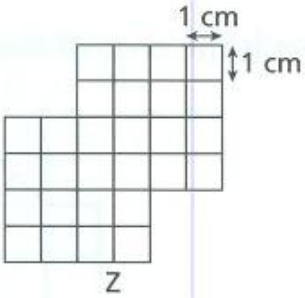
( )

Use the figures below to answer questions 4 to 8.









4. The perimeter of figure X is _____ cm more than the perimeter of figure Y.

(1) 1
(2) 2
(3) 3
(4) 4

( )

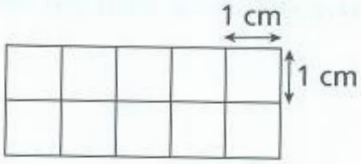
5. The area of figure W is _____ cm^2 less than the area of figure Z.
   (1) 7 (2) 6
   (3) 5 (4) 4 ( )

6. Which two figures have the same perimeter?
   (1) W and X (2) X and Y
   (3) W and Z (4) X and Z ( )

7. Which figure has the greatest area?
   (1) W (2) X
   (3) Y (4) Z ( )

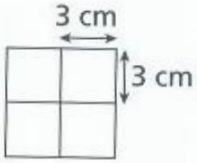
8. Which figure has the smallest area?
   (1) W (2) X
   (3) Y (4) Z ( )

9. How many 2-cm squares can you find in the figure below?



   (1) 10 (2) 5
   (3) 3 (4) 4 ( )

10. What is the perimeter of the figure below?



   (1) 9 cm (2) 12 cm
   (3) 24 cm (4) 36 cm ( )

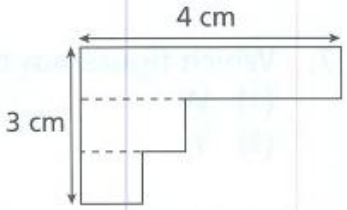
CHAPTER 13: AREA AND PERIMETER

Level 3

Exercise 1

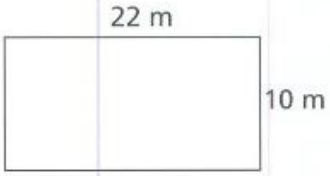
Solve the following word problems.

1. The figure below is made up of 3 different rectangles. Find the perimeter of the figure.



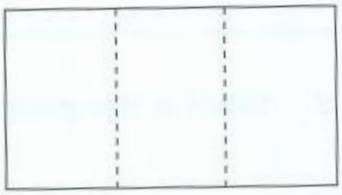
2. Leon ran around a square field 3 times to prepare for his race during Sports Day. The length of one side of the field was 75 m long. What was the distance that he ran?

3. During a basketball practice, the pupils ran 5 times around the basketball court shown below. What was the distance that they ran?

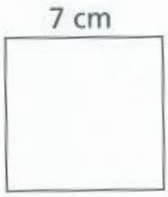


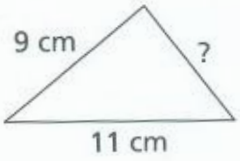
4. A plot of land is 24 m long and 9 m wide. A farmer wants to grow potatoes on half of the land. What is the area of the land used to grow potatoes?

5. A rectangular classroom has a length of 15 m and a breadth of 8 m. A teacher divides the classroom into 3 equal sections as shown below. Find the area of one section.

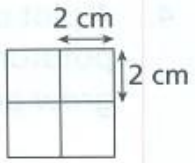


6. The triangle and square below have the same perimeter. Find the length of the unknown side of the triangle.

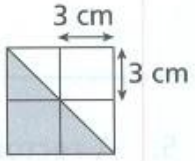




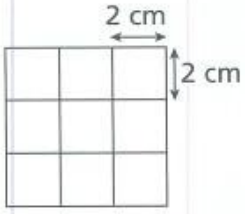
7. What is the area of the figure?



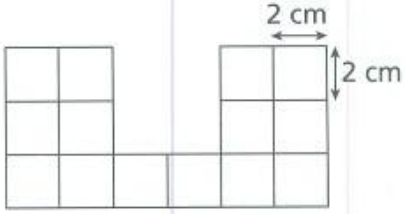
8. What is the area of the shaded figure?



9. What is the perimeter of the figure?



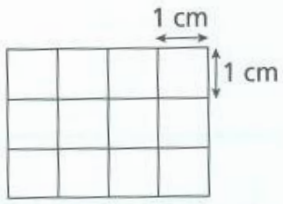
10. What is the perimeter of the figure?



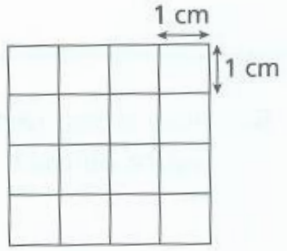
Exercise 2

Solve the following word problems.

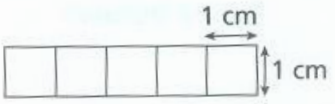
1. How many 2-cm squares can you find in the figure below?



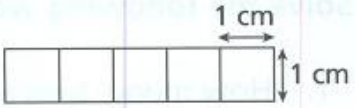
2. How many 3-cm squares can you find in the figure below?



3. How many rectangles with an area of 2 cm^2 can you find in the figure below?

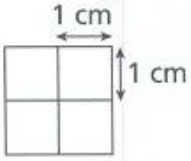


4. How many rectangles with an area of 3 cm^2 can you find in the figure below?

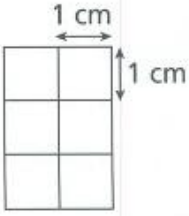


5. How many rectangles with an area of 4 cm^2 can you find in the figure below?

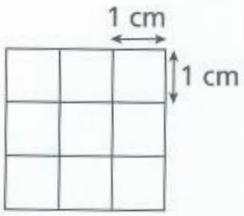
6. How many rectangles with an area of 2 cm^2 can you find in the figure below?



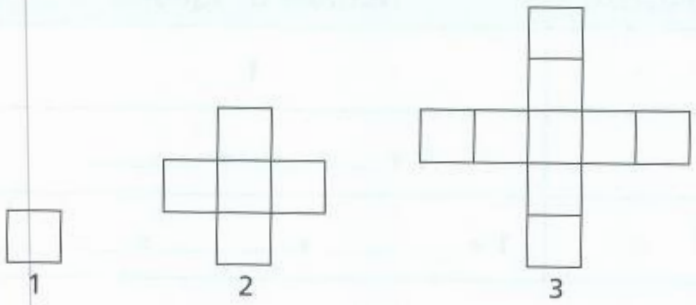
7. How many rectangles with an area of 2 cm^2 can you find in the figure below?



8. How many rectangles with an area of 3 cm^2 can you find in the figure below?



9. Look at the pattern of squares below.

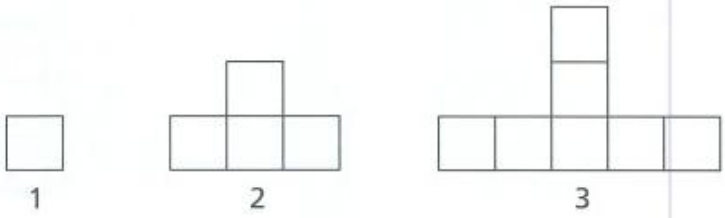


(a) Fill in the missing numbers below.

Pattern	Number of squares
1	1
2	1 + _____ = 5
3	1 + _____ + _____ = _____

(b) How many squares are there in pattern 4?

10. Look at the pattern of squares below.



(a) Fill in the missing numbers below.

Pattern	Number of squares
1	1
2	1 + _____ = _____
3	1 + _____ + _____ = _____

(b) How many squares are there in pattern 4?

(c) How many squares are there in pattern 6?