Exercise 17A

1. Fill in the blanks.

(a) A line Segment starts and ends at fixed points.

(b) A closed figure starts and ends at the same point.

(c) A closed figure made with line segments is called a Polygon.

(d) A point where two sides of a polygon meet is called a vertex.

(e) A polygon with 3 sides is called a triangle.

2. Write 'true' or 'false'.

(a) Any polygon with 4 sides is called a square. False

(b) All the sides of rectangle are equal. False

(c) A square has 4 vertices. True

(d) A line does not have a fixed length. True

(e) A line segment has two end points. True

Exercise 17B

1. Fill in the blanks.

(a) Every point on a circle is at the same distance from the Centre.

(b) A diameter = 2 × radius.

(c) The entire length of a circle is its Circumference

(d) The diameter of a circle is 1 cm. Its radius is 5mm.

(e) The radius of a circle is 50 cm. Its diameter is 1m.

2. Write 'true' or 'false'.

(a) A line segment joining the centre of a circle to a point on it is called a chord. False

(b) A chord that passes through the centre of a circle is a diameter. True

(c) A diameter divides a circle into two halves. True

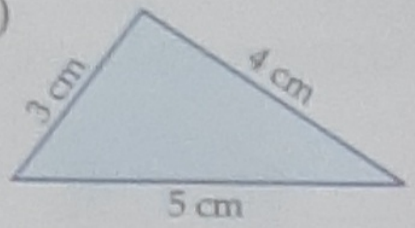
(d) A circle of radius 1 cm is smaller than a circle of radius 9 mm. False

(e) A circle has only one diameter. False

Exercise 19A

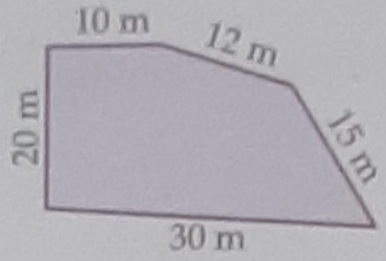
1. Find the perimeter:

(a)



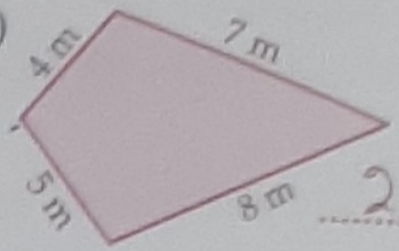
12cm

(b)



87cm

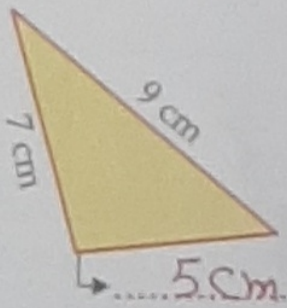
(c)



24m

2. Find the missing measurement:

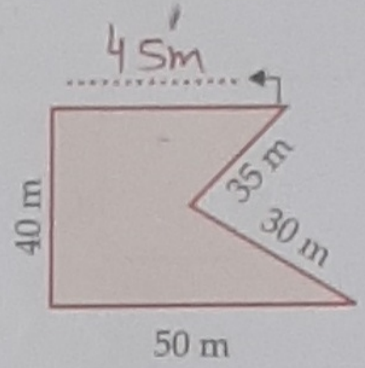
(a)



5cm

Perimeter = 21 cm

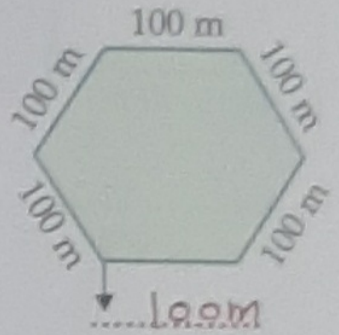
(b)



45m

Perimeter = 200 m

(c)



100m

Perimeter = 600 m

Exe- 19-A

Date

Q4:- Find the perimeter of a rectangle whose sides are -

(a) 12cm and 9 cm.

Sol →

Perimeter of a rectangle = $2(l+b)$

$= 2(12\text{cm} + 9\text{cm})$

$= 2 \times 21\text{cm}$

$= 42\text{cm}$ Ans.

(b) 24m and 20m

Sol →

Perimeter of a rectangle = $2(l+b)$

$= 2(24\text{m} + 20\text{m})$

$= 2 \times 44\text{m}$

$= 88\text{m}$ Ans.

(c) 7m 50cm and 5m 25cm

Sol →

Perimeter of a rectangle = $2(l+b)$

$= 2(7\text{m}\,50\text{cm} + 5\text{m}\,25\text{cm})$

$= 2 \times 12\text{m}\,75\text{cm}$

$= 25\text{m}\,50\text{cm}$ Ans.

Q5:- Find the perimeter of a square whose each side is

(a) 20m

Sol → Perimeter of a square = 4 x one side

$= 4 \times 20\text{m}$

$= 80\text{ m}$ Ans.

(b) 15m 20cm

Sol → Perimeter of a square = 4 x one side

$= 4 \times 15\text{m}\,20\text{cm}$

$= 60\text{m}\,80\text{cm}$ Ans

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(c) 18 m 50 cm

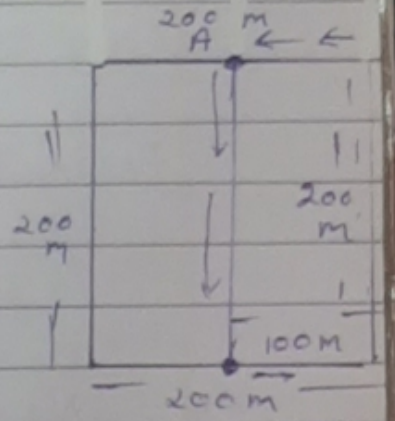
Sol → Perimeter of a square = 4 × one side
= 4 × 18 m 50 cm
= 74 m Ans.

(d) 11 m 25 cm

Sol — Perimeter of a square = 4 × one side
= 4 × 11 m 25 cm
= 45 m Ans.

Q6 Sol —

Distance covered by Mrs. Sudarajan
= 2(200 m + 100 m) × 3
= 2 × 300 m × 3
= 600 m × 3
= 1800 m



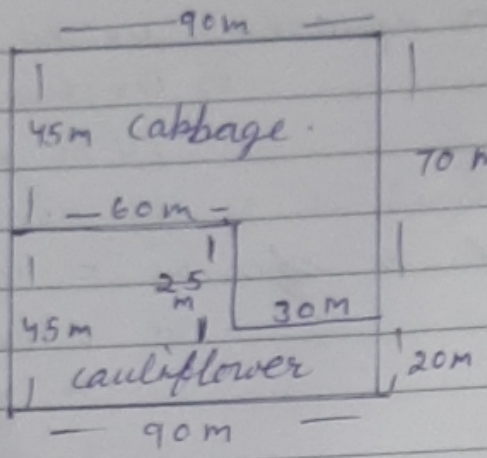
Distance covered by Mr. Sudarajan
= 4 × 200 m × 3
= 800 m × 3
= 2400 m.

2400 − 1800 = 600 m.

Mr. Sundarajan walks more by 600 m.

Date / /

Q7 Sol –

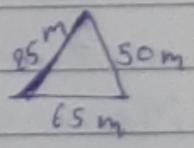


Perimeter of cabbage patch = Sum of all sides
= 90m + 70m + 30m + 25m + 60m + 45m
= 320 m

Perimeter of cauliflower patch = Sum of all sides
= 90m + 20m + 30m + 25m + 60m + 45m
= 270m.

Ans = No, they are not equal.

Q8 Sol –



Distance covered by Shahnaz and Shama
= Perimeter of triangular park × 5
= (85m + 50m + 65m) × 5
= 200m × 5
= 1000 m = 1 Km Ans.

Q9 Sol –

Mr. Khetri wants to build a wall around his rectangular plot of land.

Length of plot = 500 m
Breadth of plot = 400 M

Perimeter of rectangular plot = $2(l+b)$
$= 2(500\,m + 400\,m)$
$= 2 \times 900\,m$
$= 1800\,M.$

Cost of the building the wall = Rs 1000 per m.
He will spend = 1800×1000
= Rs 18,00,000 Ans.

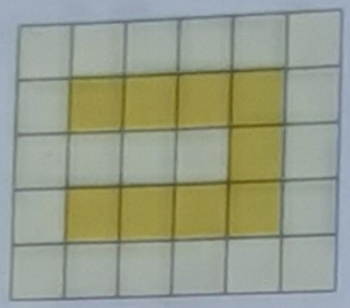
Exercise 19B

1. The side of each square is 1 cm. Find the area of each shaded part. If more than half of a square is shaded, count it as 1. If half is shaded, count it up with another half. If less than half is shaded, ignore. The first one is done for you.

(a)

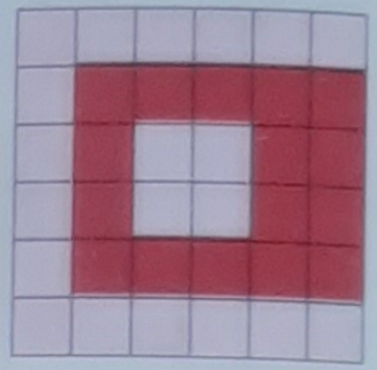
Area = 6 sq cm

(b)



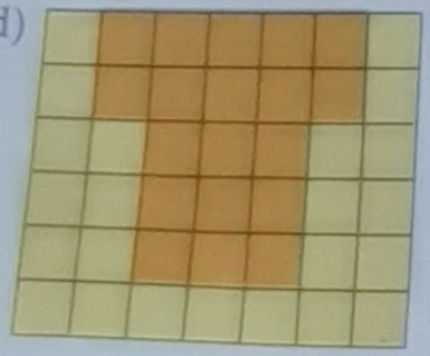
Area = 9 sq cm

(c)



Area = 16 sq cm

(d)

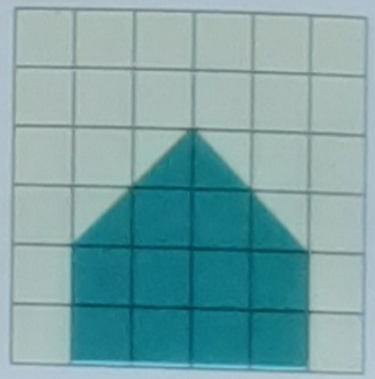


Area = 19 sq cm

(e)

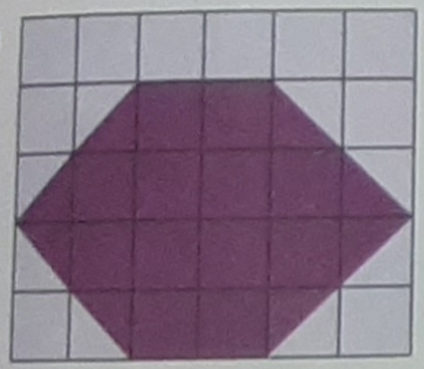
Area = 8 sq cm

(f)



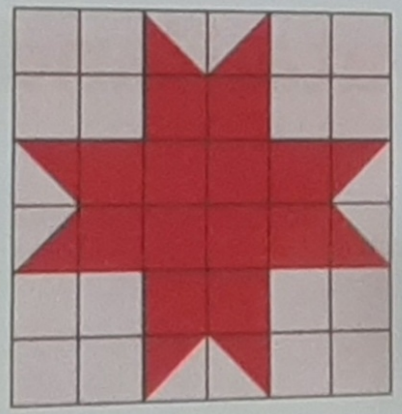
Area = 12 sq cm

(g)



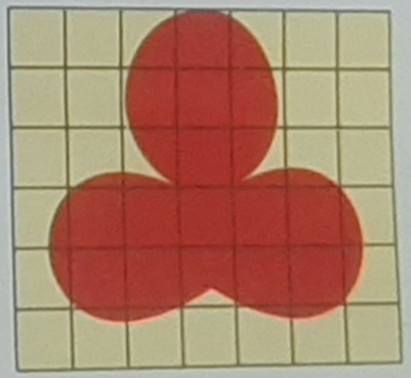
Area = 16 sq cm

(h)



Area = 16 sq cm

(i)



Area = 17 sq cm

2. Find the area of a rectangle of sides:

Exe- 19-B

Date ___/___/___

Q2:- Find the area of a rectangle of sides

(a) 9mm and 7 mm

Sol- Area of a rectangle = l x b
= 9mm x 7 mm
= 63 sq mm Ans.

(b) 60mm and 27mm

Sol- Area of a rectangle = l x b
= 60mm x 27mm
= 1620 sq mm Ans.

(c) 115 cm and 40 cm

Sol- Area of a rectangle = l x b
= 115 cm x 40 cm
= 4600 sq cm Ans.

(d) 30m and 15m

Sol- Area of a rectangle = l x b
= 30m x 15m
= 450 sq m Ans.

Q3:- Find the area of a square of side -

(a) 5mm

Sol- Area of a square = side x side
= 5mm x 5mm
= 25 sq mm Ans.

(b) 12 cm

Sol- Area of a square = side x side
= 12cm x 12cm
= 144 sq cm Ans.

(c) 25 cm

Sol- Area of a square = side x side
= 25 cm x 25 cm
= 625 sq cm.

(d) 40 m

Sol- Area of a square = 40m x 40m
= 1600 sq m Ans.

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"Think big, think fast, think ahead. Ideas are no one's monopoly." - Dhirubhai Ambani

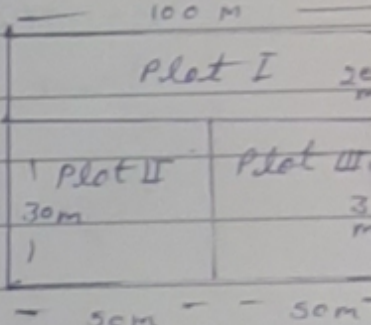
Q4 Sol:— Length of a book = 26cm
Breadth of book = 20 cm
Area of its front cover = 26cm × 20 cm
= 520 sq cm Ans.

Q5 Sol:—
Each side of a square piece of cardboard = 40cm
Area = side × side
= 40 cm × 40 cm
= 1600 sq. cm

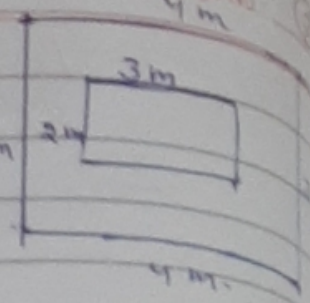
Side of one square piece = 2cm
Area = side × side
= 2cm × 2cm
= 4 sq cm

Number of square pieces can be cut of from cardboard = $\frac{1600}{4}$
= 400 Ans.

Q6 Sol—
(a) Length of rectangular piece of land = 100cm
Breadth = 50m
Area = l × b
= 100m × 50m = 5000 sq m Ans.



(b) Area of Ist plot = 100m × 20m
= 2000 sq.m.
Area of 2nd plot = 30m × 50m
= 1500 sq m
Area of 3rd plot = 50m × 30m
= 1500 sq. m.



Q7 Sol —
Length of a room = 4 m
Breadth of a room = 3 m
Area of room = 4 m × 3 m
= 12 sq m

Length of carpet = 3m
Breadth of carpet = 2m
Area of carpet = 3m × 2m
= 6 sq m

The area of the room is left uncarpeted = 12 sq m − 6 sq m
= 6 sq m Ans.

Q8 (a) Sol —
The area of a room = 15 sq m
1 sq m = 10,000 sq cm
15 sq m = 10,000 × 15
= 150,000 sq cm.
Length of one tile = 30 cm
Breadth of one tile = 20 cm
Area of one tile = 30 cm × 20 cm
= 600 sq cm.
Required tiles = $\frac{150,000 \text{ sq cm}}{600 \text{ sq cm}}$
= 250 Ans.

(b) Sol — The price of 10 tiles = Rs 250
The price of 1 tile = $\frac{250}{10}$
= Rs 25
The total cost of the 250 tiles = 250 × 25
= Rs 6250 Ans

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