MATHS

BOOKS - SUBHASH PUBLICATION

PERIMETER AND AREA

Example

1. The length and breadth of a rectangular piece of land are 500m and 300m respectively.

Find: (i) its area (ii) the cost of the land, if $1m^2$ of the land costs rs10,000.

2. Find the area of a square park whose perimeter is 320m.

3. Find the breadth of a rectangular plot of land, if its area is $440m^2$ and the length is

22m. Also find its perimeter.

4. The perimeter of a rectangular sheet is 100cm. If the length is 35cm, find its breadth. Also find the area.

5. The area of a square park is the same as of a rectangular park. If the side of the square park

is 60m and the length of the rectangular park is 90m, find the breadth of the rectangular park.

6. A wire is in the shape of a rectangle.Its length is 40cm and breadth is 22cm. If the same wire is rebent in the shape of a square,what will be the measure of each side. Also find which shape encloses more area?
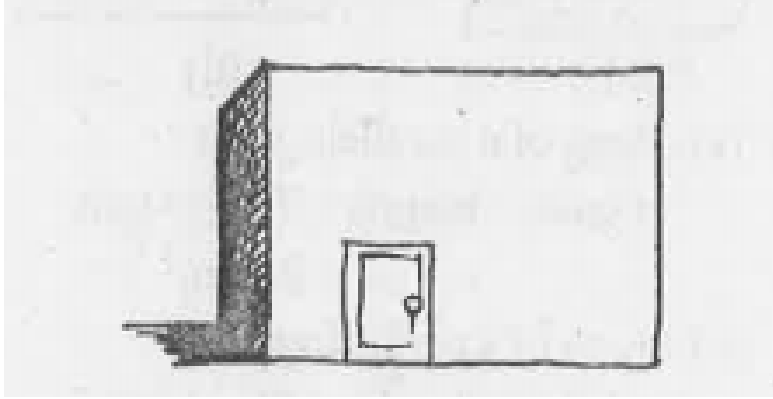
7. The perimeter of a rectangle is 130cm. If the breadth of the rectangle is 30cm, find its length. Also find the area of the rectangle.
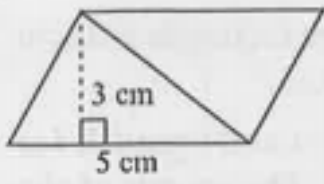
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8. A door of length 2m and breadth 1m is fitted in a wall. The length of a wall is 4.5m and the breadth is 3.6m [fig 11.6]. Find the cost of white washing the wall, if the rate of white washing
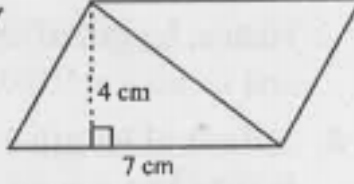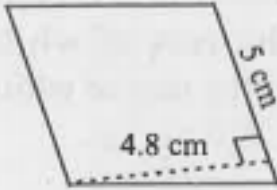
the wall is rs20 per m^2.

9. Find the area of each of the following parallelogram.

3 cm
5 cm
(a)

4 cm
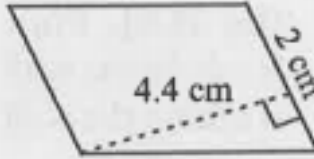7 cm
(b)

5 cm
4.8 cm
(c)

4.4 cm
2 cm
(d)

10. Find the area of each of the following triangles.

3 cm

4 cm

(a)

5 cm

3.2 cm

(b)

4 cm

3 cm

(c)

2 cm

3 cm

(d)
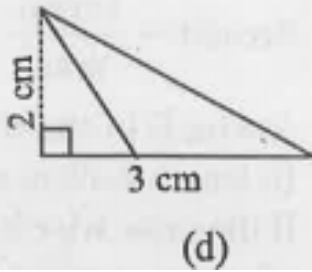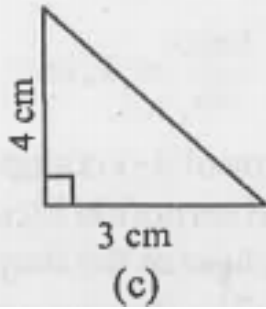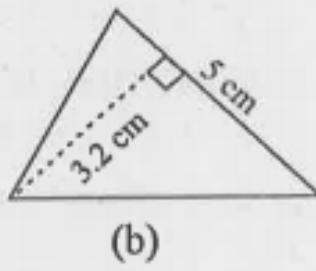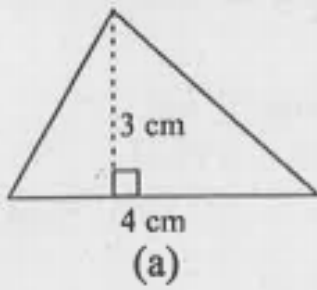
11. Find the missing values:

S.No.	Base	Height	Area of the Parallelogram
(a)	20 cm		246 cm²
(b)		15 cm	154.5 cm²
(c)		8.4 cm	48.72 cm²
(d)	15.6 cm		16.38 cm²

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12. Find the missing values:

Base	Height	Area of Triangle
15 cm	------	87 cm²
------	31.4 cm	1256 mm²
22 cm	------	170.5 cm²

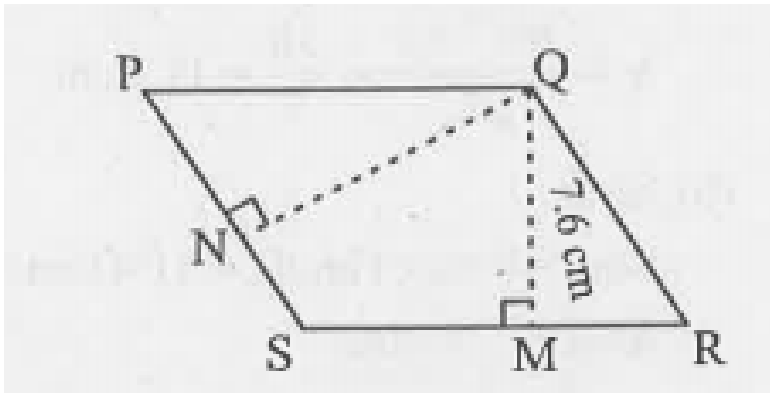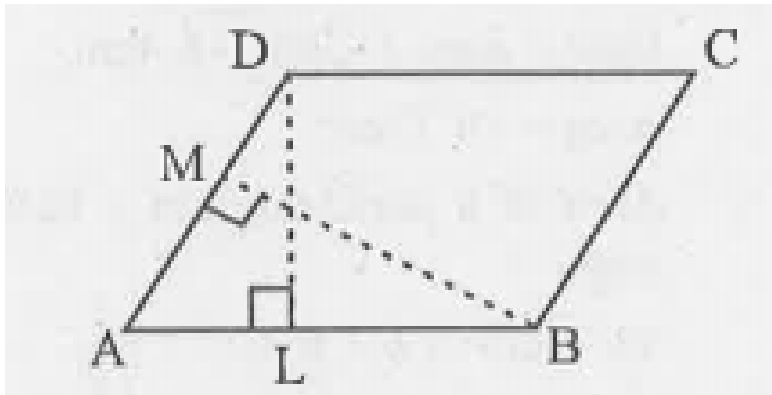▶ Watch Video Solution

13. PQRS is a parallelogram. QM is the height from Q to SR and QN is the height from Q to PS. If SR=12cm and QM-7.6mc. Find: the area of the parallelogram PQRS.
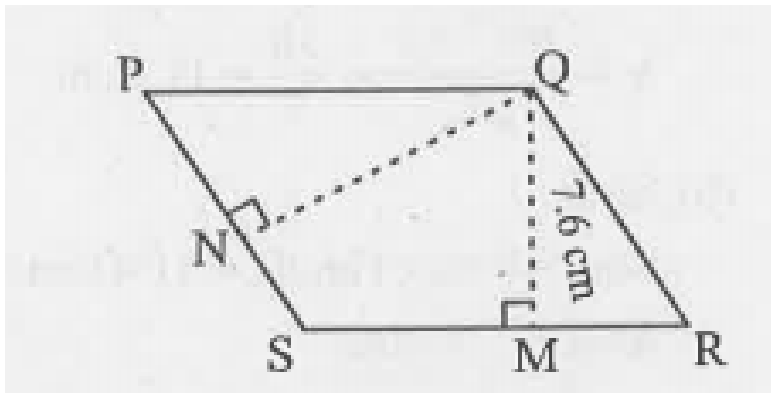
14. PQRS is a parallelogram. QM is the height from Q to SR and QN is the height from Q to PS. If SR=12cm and QM-7.6mc. Find: QN, if PS=8cm.
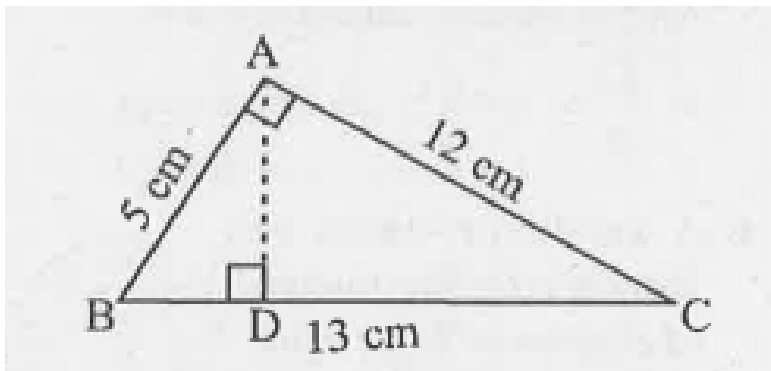
15. DL and BM are the ehights on sides AB and AD respectively of parallelogram ABCD. If the area of the parallelogram is $1470 cm^2$, AB=35cm and AD=49cm, Find the length of BM and DL.

16. floor ABC is right angled at A. AD is perpendicular to BC. If $AB = 5cm$, $BC = 13cm$ and $AC = 12cm$. Find the area of floor ABC. Also find the length of AD.

17. `lfloorABC is isosceles with AB=AC=7.5cm and BC=9cm. The height AD from A to BC, is 6cm. Find the area of ABC. What will be the height from C to AB i.e., CE
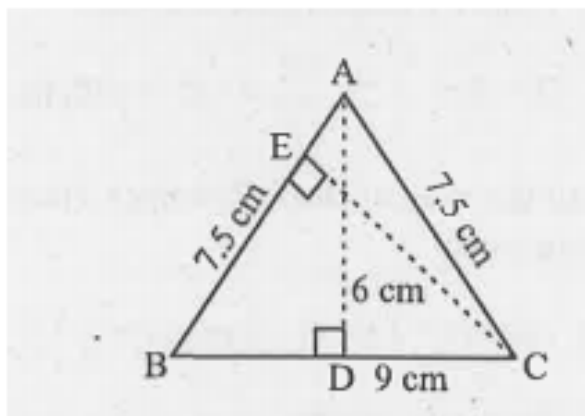
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18. Find the circumference of the circles with the following radius: (Take $\pi = \dfrac{22}{7}$) 14cm

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19. Find the circumference of the circles with the following radius: (Take $\pi = \dfrac{22}{7}$) 28cm

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20. Find the circumference of the circles with the following radius: (Take $\pi = \dfrac{22}{7}$) 21cm

21. Find the area of the following circles, given that: radius=14mm (Take $\pi = \dfrac{22}{7}$)

22. Find the area of the following circles, given that: diameter=49m (Take $\pi = \dfrac{22}{7}$)

**23.** Find the area of the following circles, given that: radius=5cm (Take $\pi = \dfrac{22}{7}$)

24. If the circumference of a circular sheet is 154m, find its radius. Also find the area of the sheet. [Take $\pi = \dfrac{22}{7}$]

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25. A gardener wants to fence a circular garden of diameter 21m. Find the length of the rope he needs to purches, if he makes 2 rounds of fence. Also find the cost of the rope,

if it costs Rs4 per meter. [Take $pr = \dfrac{22}{7}$]
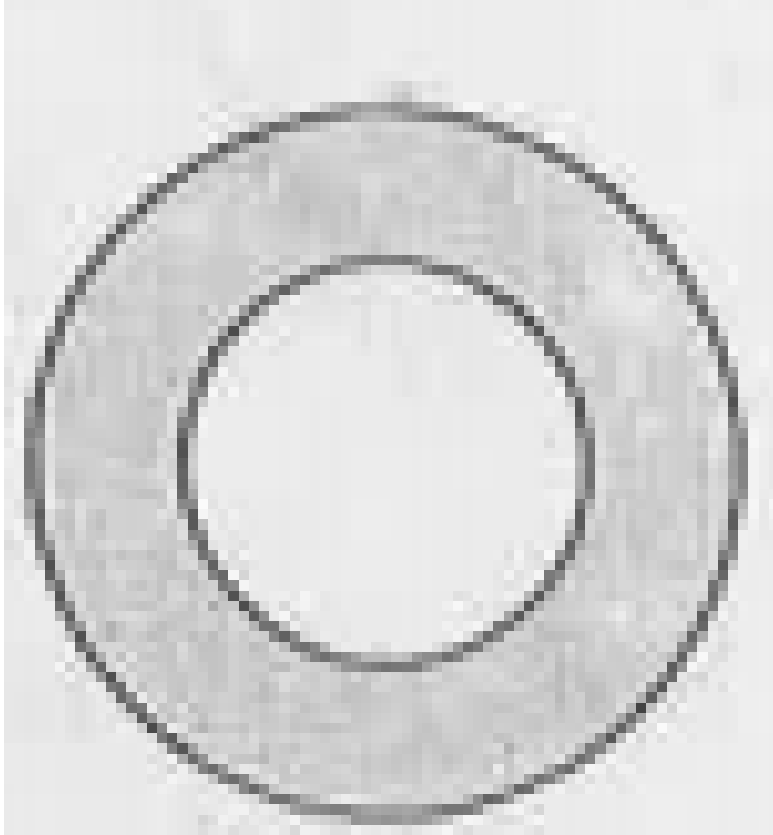
26. From a circular sheet of radius 4cm, a circle of radius 3cm is removed. Find the area of the remaining sheet. (Take $\pi = 3.14$)
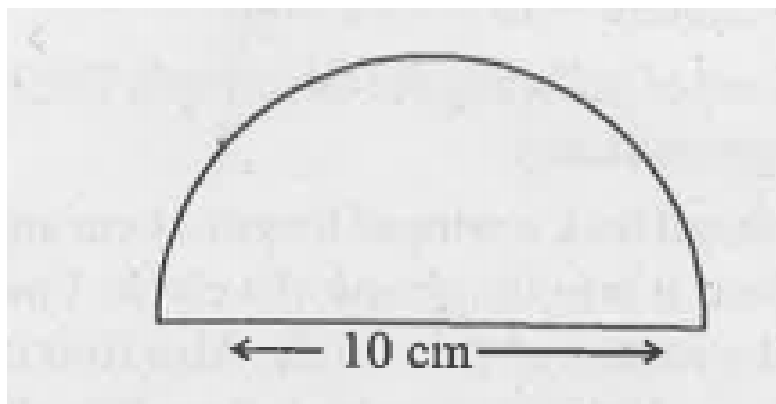
27. Saima wants to put a lace one the edge of a circular table cover of diameter 1.5m. Find the elength of a lace required and also find its cost if one meter of the lace costs Rs15. (Take $\pi = 3.14$).

28. Find the perimeter of the adjoingin figure,

which is a semicircle including its diameter.

$\longleftarrow$ 10 cm $\longrightarrow$

29. Find the cost of polishing the circular table top of diameter 1.6m, if the rate of polishing is $15m^2$ (Take $\pi = 3.14$).

30. Shazli took a wire of length 44cm and bent it into she shape of a circle. Find the radius of that circle. Also find its area. If the same wire is bent into the shape of a square, what will be the length of each of its sides? Which figure
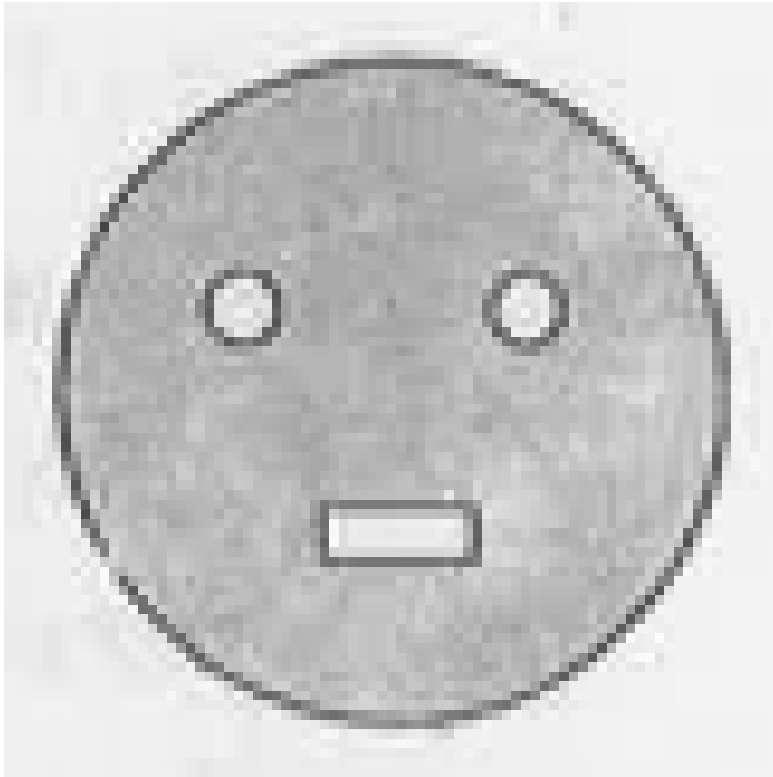
encloses more area, the circle or the square?

(Take `pi=22/7)

31. From a circular card sheet of radius 14cm, two circles of radius 3.5cm and a rectangle of length 3cm and breadth 1cm are removed (as shown in the adjoining figure. Find the area of

the remaining sheet. (Take $\pi = \dfrac{22}{7}$)

32. A circle of radius 2cm is cut out from a square piece of a aluminium sheet of side 6cm. What is the area of the left over aluminium sheet? (Take $\pi = 3.14$)
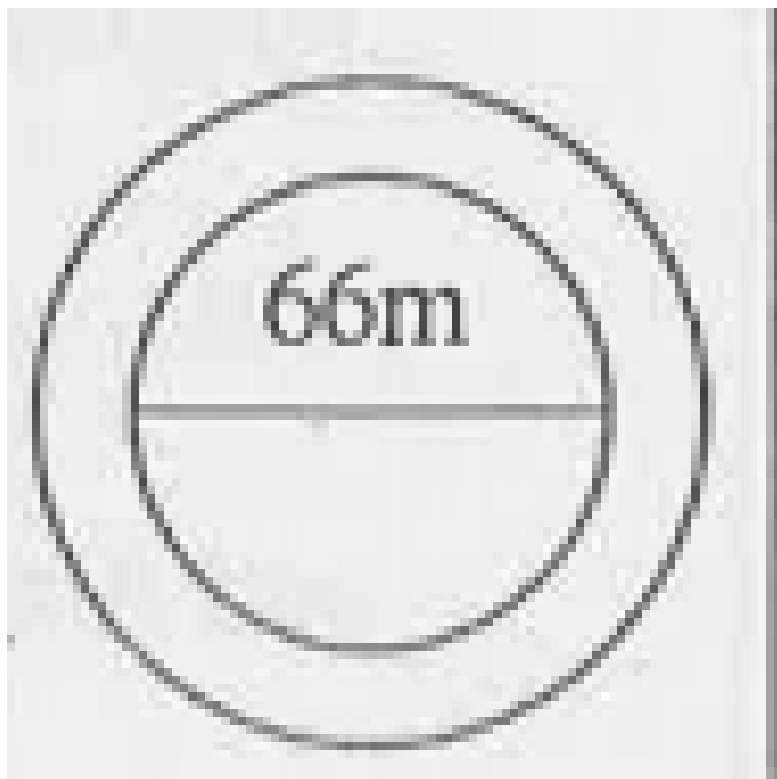
33. The circumference of a circle is 31.4cm. Find the radius and the area of the circle. (Take $\pi = 3.14$)

34. A circular flower bed is surrounded by a path 4m wide. The diameter of the flower bed is 66 m. What is the area of this path? (Take $\pi = 3.14$)
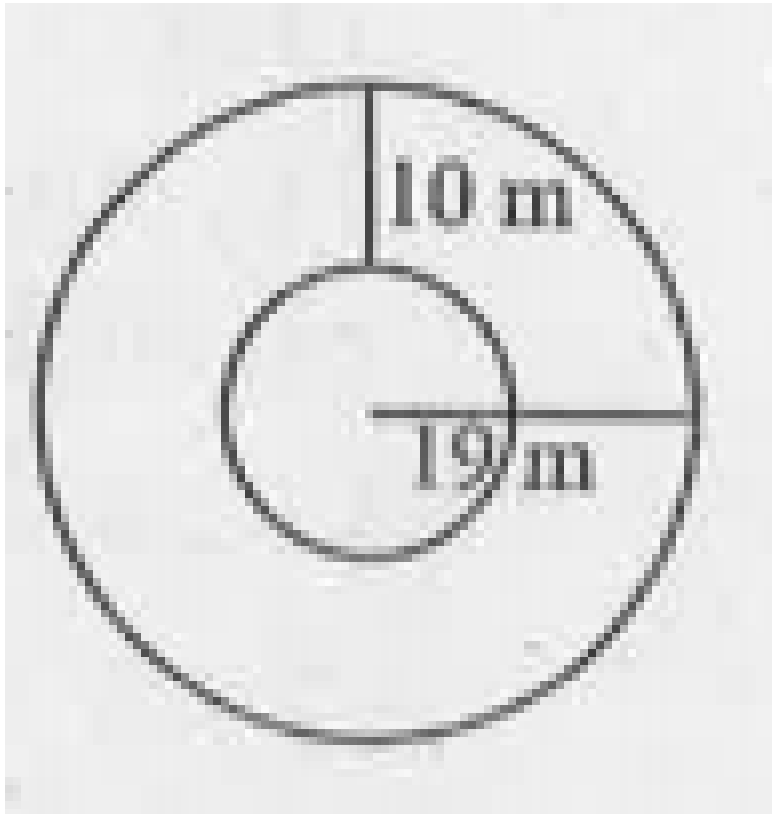
35. A circular flower garden has an area of $314m^2$. A sprinkler at the center of the garden can cover an area that has a radius of 12m. Will the spinkler water the entire garden? (Take $\pi = 3.14$)

36. Find the circumference of the inner and the outer circles, shown in the adjoining

figure? (Take $\pi = 3.14$)

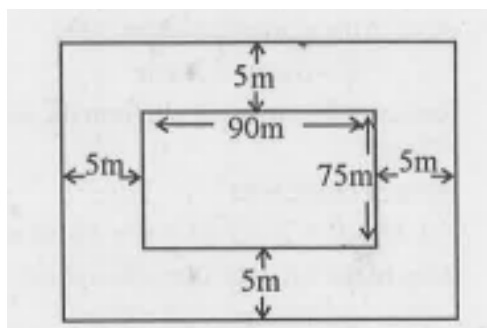**37.** How many times a wheel of radius 28 cm must rotate to go 352m? (Take $\pi = \dfrac{22}{7}$)

38. The minute hand of a circular clock is 15cm long. How far does the tip of the minute hand move in 1 hour? (Take $\pi = 3.14$)

39. A graden is 90 m long and 75m broad. A path 5 m wide is to be built outside and around it. Find the area of the path. Also find the area of the graden in hectare.

40. A 3m wide path runs outside and around a rectangular park of length 125m an breadth 65m. Find the area of the path.

41. A picture is painted on a cardboard 8 cm long and 5 cm wide such that there is a margin of 1.5cm along each of its sides. Find the total area of the margin.

42. A verandah of width 2.25m is constructed all along outside a room which is 5.5m long and 4m wide. Find: the area of the verandah.

43. A verandah of width 2.25m is constructed all along outside a room which is 5.5m long and 4m wide. Find: the cost of cementing the floor of the verandah at the rate of Rs. 200 per m^2.

44. A path 1 m wide is built along the border and inside a square garden of side 30m. Find: the area of the path

45. A path 1 m wide is built along th eborder and inside a square garden of side 30m. Find: the cost of planting grass in the remaining

portion of the garden at the rate of Rs.40 per m^2.

46. Two cross roads, each of width 10m, cut at right angles through the center of a rectangular park of length 700m and breadth 300m and parallel to its sides. Find the area of the roads. Also find the area of the park excluding cross roads. Give the answer in hectares.

47. Through a rectangular field of length 90m and breadth 60m, two roads are constructed which are parallel to the sides and cut each other at right angles through the center of the fields. If the width of each road is 3 m. Find: the cost of constructing the roads at the rate of Rs.110 $/m^2$.
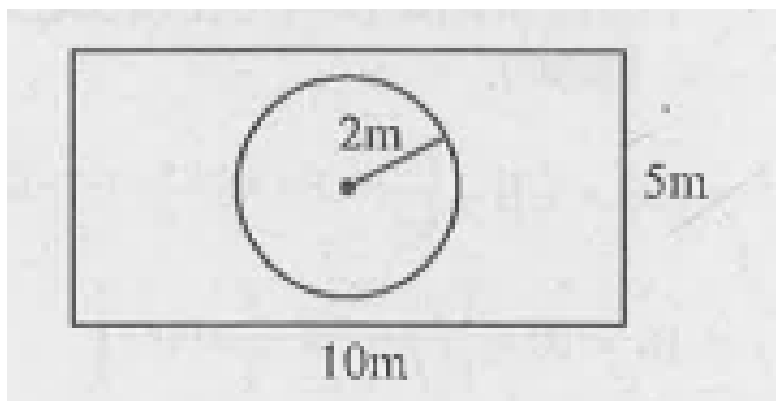
48. Pragya wrapped a cord aroud a circular pipe of radius 4cm (adjoining figure) and cut of the length required of the cord. Then she wrapped it around a square box of side 4 cm (also shown). Did she have any cord left? $(\pi = 3.14)$
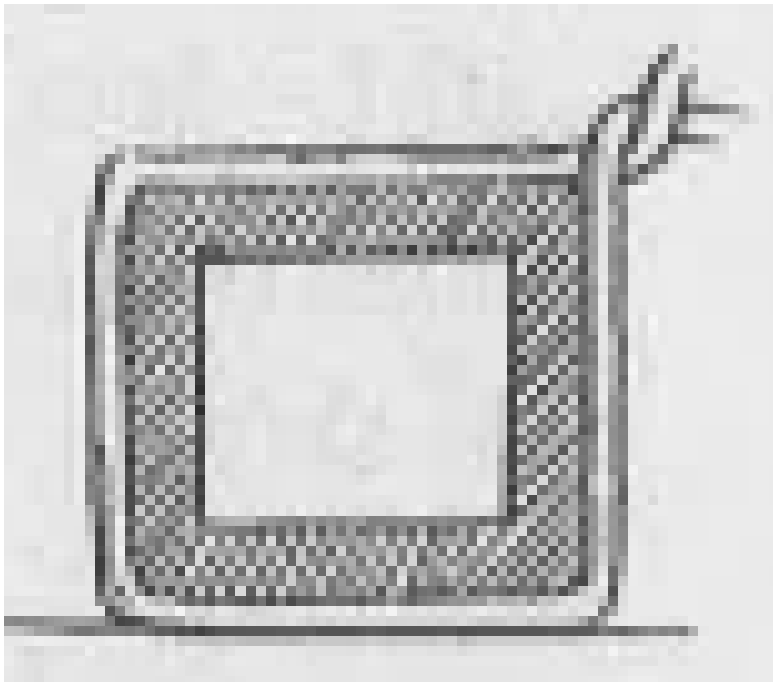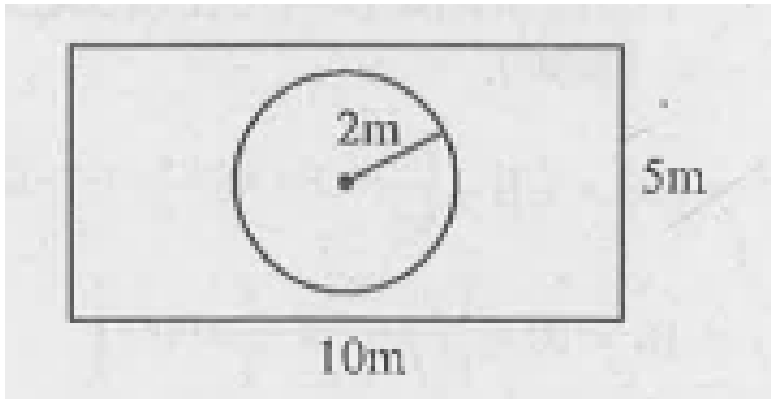
49. The adjoining figure represents a rectangular lawn with a circular flower bed in the middle. Find: the area of the whole land.

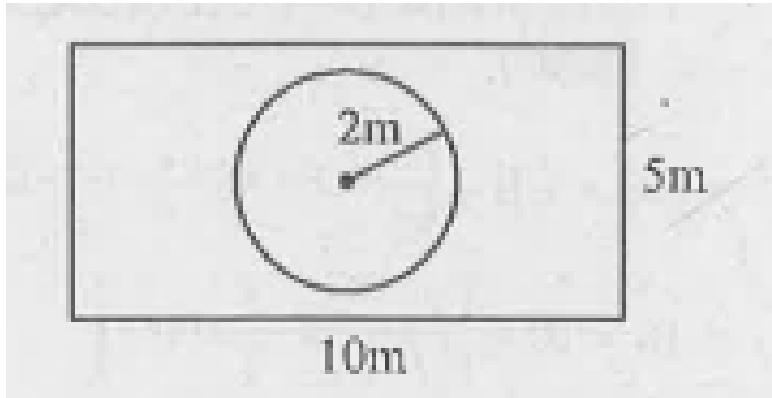**50.** The adjoining figure represents a rectangular lawn with a circular flower bed in the middle. Find: the area of the flower bed

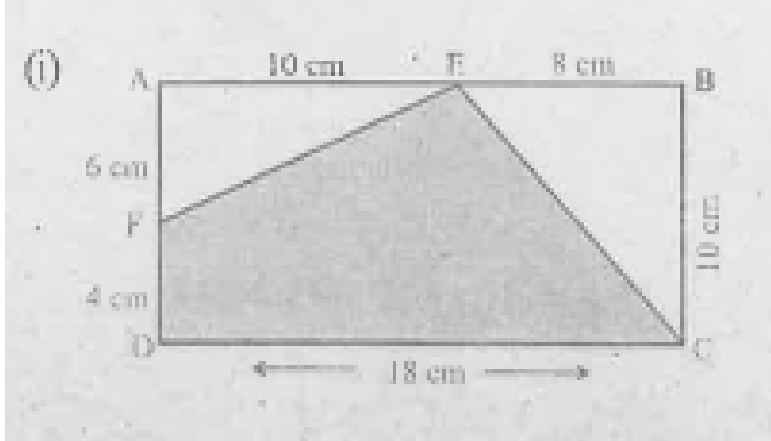**51.** The adjoining figure represents a rectangular lawn with a circular flower bed in

the middle. Find: the circumference of the flower bed.

52. In the following figures, find the area of the shaded portions:

(i)

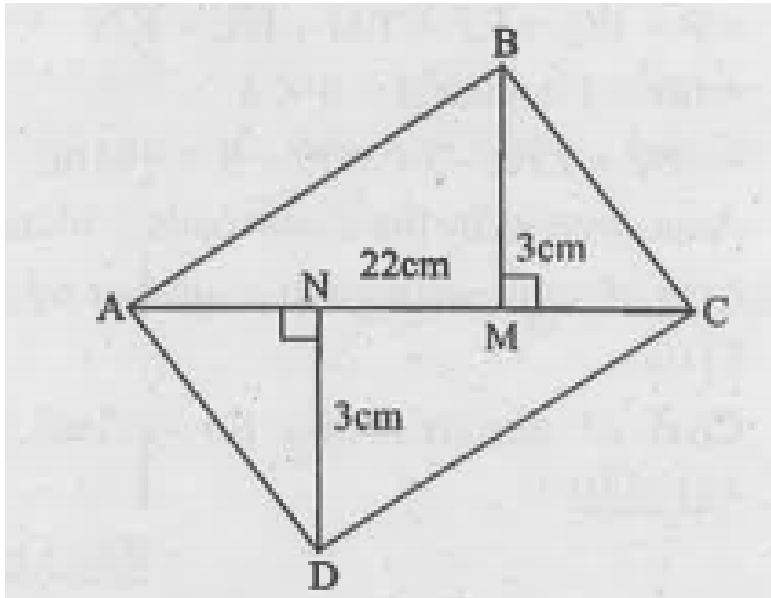| | 10 cm | E | 8 cm | |
A				B
6 cm				
F				10 cm
4 cm				
D		18 cm		C

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53. Find the area of the quadrilateral ABCD. Here, AC=22cm, BM=3cm, DN=3cm, and

$BM \perp AC, DN \perp AC.$