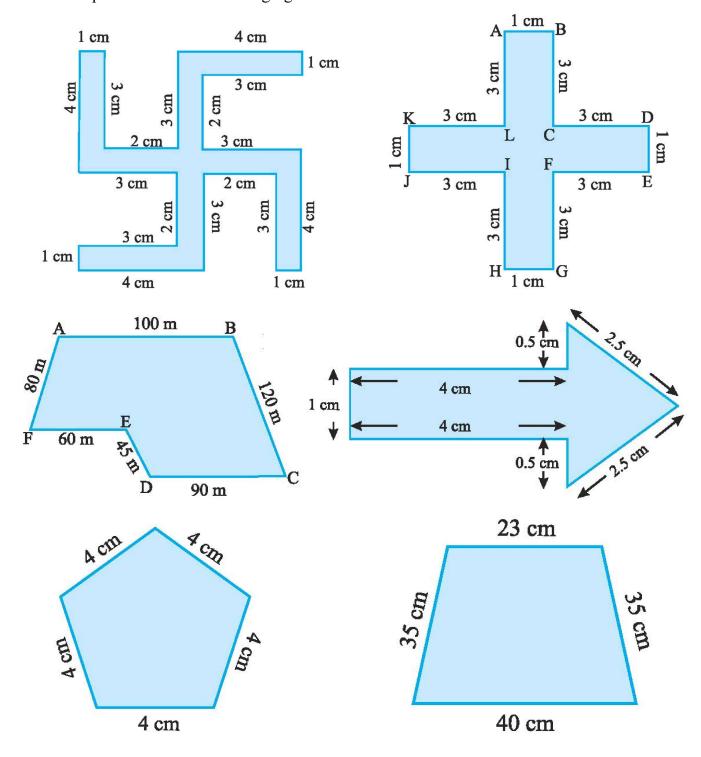
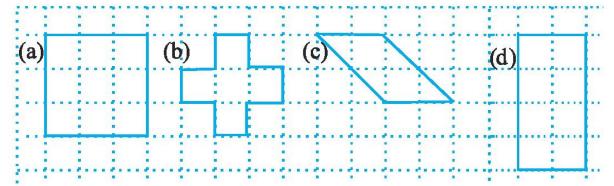
PRACTICE QUESTIONS CLASS VI: CHAPTER – 10 MENSURATION

- 1. Meera went to a park 150 m long and 80 m wide. She took one complete round on its boundary. What is the distance covered by her?
- 2. Find the perimeter of the following figures:



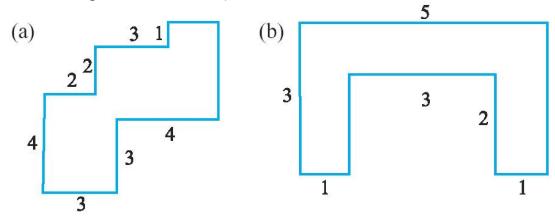
3. Shabana wants to put a lace border all around a rectangular table cover, 3 m long and 2 m wide. Find the length of the lace required by Shabana.

- **4.** An athlete takes 10 rounds of a rectangular park, 50 m long and 25 m wide. Find the total distance covered by him.
- 5. Find the perimeter of a rectangle whose length and breadth are 150 cm and 1 m respectively.
- **6.** A farmer has a rectangular field of length and breadth 240 m and 180 m respectively. He wants to fence it with 3 rounds of rope. What is the total length of rope he must use?
- 7. Find the cost of fencing a rectangular park of length 250 m and breadth 175 m at the rate of Rs 12 per metre.
- **8.** Find the distance travelled by Shaina if she takes three rounds of a square park of side 70 m.
- **9.** Pinky runs around a square field of side 75 m, Bob runs around a rectangular field with length 160 m and breadth 105 m. Who covers more distance and by how much?
- **10.** Find the perimeter of a regular pentagon with each side measuring 3 cm.
- 11. The perimeter of a regular hexagon is 18 cm. How long is its one side?
- 12. Find the perimeter of a triangle with sides measuring 10 cm, 14 cm and 15 cm.
- **13.** Find the perimeter of a regular hexagon with each side measuring 8 m.
- **14.** Find the side of the square whose perimeter is 20 m.
- 15. The perimeter of a regular pentagon is 100 cm. How long is its each side?
- **16.** Two sides of a triangle are 12 cm and 14 cm. The perimeter of the triangle is 36 cm. What is its third side?
- 17. Find the cost of fencing a square park of side 250 m at the rate of Rs 20 per metre.
- **18.** Find the cost of fencing a rectangular park of length 175 m and breadth 125 m at the rate of Rs 12 per metre.
- **19.** Find the areas of the following figures by counting square:



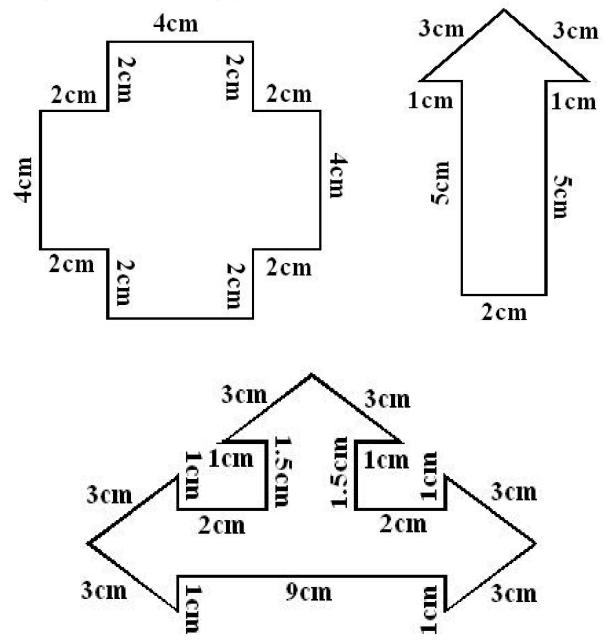
- 20. Find the area of a rectangle whose length and breadth are 12 cm and 4 cm respectively.
- **21.** Find the area of a square plot of side 8 m.
- **22.** The area of a rectangular piece of cardboard is 36 sq cm and its length is 9 cm. What is the width of the cardboard?

- 23. Bob wants to cover the floor of a room 3 m wide and 4 m long by squared tiles. If each square tile is of side 0.5 m, then find the number of tiles required to cover the floor of the room.
- 24. Find the area in square metre of a piece of cloth 1m 25 cm wide and 2 m long.
- **25.** What is the cost of tiling a rectangular plot of land 500 m long and 200 m wide at the rate of Rs 8 per hundred sq m.?
- **26.** A table-top measures 2 m by 1 m 50 cm. What is its area in square metres?
- **27.** A room is 4 m long and 3 m 50 cm wide. How many square metres of carpet is needed to cover the floor of the room?
- **28.** A floor is 5 m long and 4 m wide. A square carpet of sides 3 m is laid on the floor. Find the area of the floor that is not carpeted.
- **29.** Five square flower beds each of sides 1 m are dug on a piece of land 5 m long and 4 m wide. What is the area of the remaining part of the land?
- 30. How many tiles whose length and breadth are 12 cm and 5 cm respectively will be needed to fit in a rectangular region whose length and breadth are respectively:(a) 100 cm and 144 cm (b) 70 cm and 36 cm.
- **31.** By splitting the following figures into rectangles, find their areas (The measures are given in centimetres).



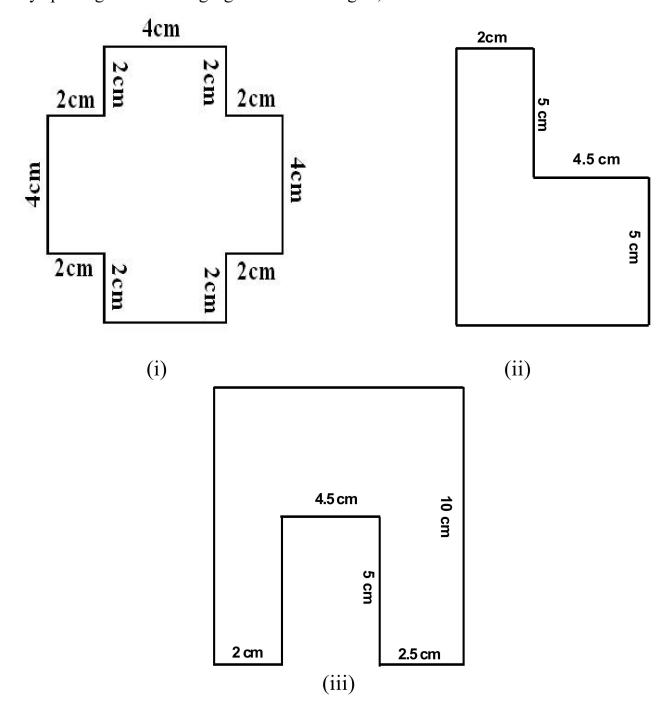
- **32.** Find the cost of fencing a rectangular park of length 500 m and breadth 250 m at the rate of Rs 20 per metre.
- 33. Find the distance travelled by Uday Kiran if he takes fifty rounds of a square park of side 25 m.
- **34.** Find the perimeter of a regular pentagon with each side measuring 10 cm.
- **35.** The perimeter of a regular hexagon is 78 cm. How long is its one side?
- **36.** Find the perimeter of a triangle with sides measuring 20 cm, 24 cm and 35 cm.
- 37. Find the perimeter of a regular hexagon with each side measuring 15 m.
- **38.** Find the side of the square whose perimeter is 84 m.
- **39.** Two sides of a triangle are 22 cm and 28 cm. The perimeter of the triangle is 70 cm. What is its third side?

- **40.** Find the cost of fencing a square park of side 125 m at the rate of Rs 15 per metre.
- **41.** Find the area of a rectangle whose length and breadth are 20 cm and 15 cm respectively.
- **42.** Find the perimeter of the following figures:



- **43.** The area of a rectangular bulleting board is 18750 sq cm and its length is 150 cm. What is the width of the bulleting board?
- **44.** Vandana wants to cover the floor of a room 6 m wide and 8 m long by squared tiles. If each square tile is of side 0.5 m, then find the number of tiles required to cover the floor of the room.
- 45. Find the area in square metre of a piece of cloth 2m 25 cm wide and 4 m long.
- **46.** What is the cost of tiling a rectangular plot of land 800 m long and 250 m wide at the rate of Rs 12 per 100 m²?
- 47. A tabletop measures 3 m 50 cm by 2 m 50 cm. What is its area in square metres?

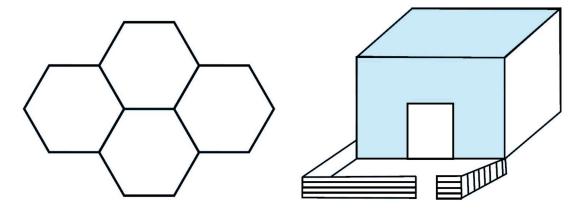
- **48.** A room is 6 m long and 4 m 50 cm wide. How many square metres of carpet is needed to cover the floor of the room?
- **49.** How many tiles whose length and breadth are 15 cm and 12 cm respectively will be needed to fit in a rectangular region whose length and breadth are respectively: (a) 100 cm and 144 cm (b) 70 cm and 36 cm.
- **50.** By splitting the following figures into rectangles, find their areas



ASSIGNMENT QUESTIONS

<u>CLASS VI: CHAPTER – 10</u> MENSURATION

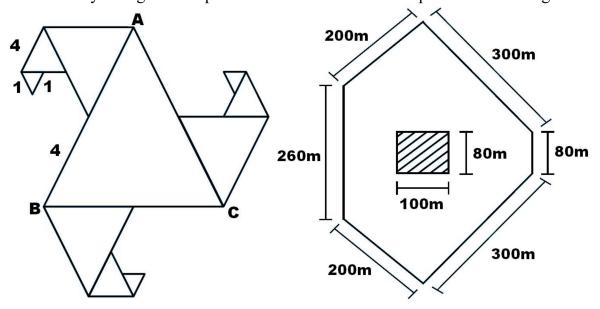
1. Four regular hexagons are drawn so as to form the design as shown in below figure. If the perimeter of the design is 28cm, find the length of each side of the hexagon.



- 2. There is a rectangular lawn 10m long and 4m wide in front of Meena's house (see above right sided figure). It is fenced along the two smaller sides and one longer side leaving a gap of 1m for the entrance. Find the length of fencing.
- **3.** Perimeter of an isosceles triangle is 50cm. If one of the two equal sides is 18cm, find the third side.
- **4.** Find (a) area and (b) perimeter of a square whose side is 12 cm.
- 5. The side of a square wall is 3m 50 cm. Determine the cost of colour washing it at the rate of Rs. 2 per sq.m.
- **6.** The perimeter of a square playground is 1200m. Find its area
- 7. Find the area of the squares, whose sides are given below: (a) 7cm (b) 12 dm (c) 2 m 25 cm (d) 3.2 m
- **8.** Find the area of square land in hectares whose side is 250 m.
- 9. Calculate the cost of levelling a square garden of side 75 m at the rate of Rs. 8 per sq.m
- **10.** The side of a square hall is 8 m 5 dm. Find the cost of fixing tiles on its floor at the rate of Rs. 300 per sq.m.
- 11. Find the area of a square whose perimeter is 600 m.
- 12. The perimeter of the floor of a square room is 22m. Find its area.
- **13.** Find the area and perimeter of a rectangle whose length is 2m and breadth is 70cm.
- **14.** The area of a rectangular field is 3.75 hectares. If the length is 250 m find its breadth.

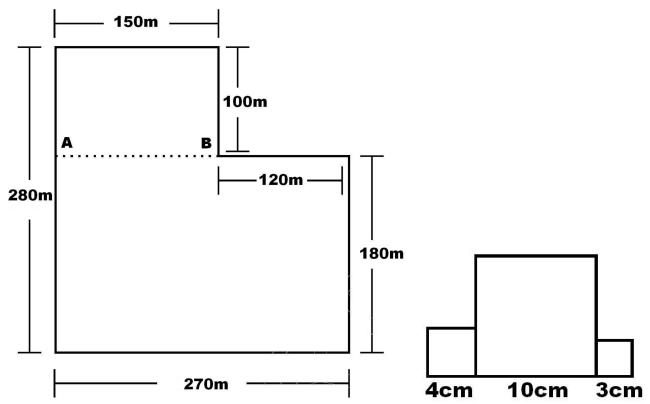
- **15.** Find the cost of fencing a rectangular park of length 170 m and breadth 100 m at the rate of Rs. 5 per metre.
- 16. The perimeter of the floor of a rectangular hall is 24 m. Its length is 7 m. Find its area.
- 17. Find the area of the rectangles whose lengths and breadths are given below: (a) 15cm, 8 cm (b) 3 dm, 5.6 cm (c) 2 m 5 dm, 1 m 20 cm (d) 6.5 m, 4.5 m
- **18.** A carpet is 5 m long and 3 m 5 dm wide. If the cost of 1 sq.m is Rs. 40 find the cost of the carpet.
- 19. The length and breadth of a rectangular field are 500 m and 69 m. Find its area in hectares.
- **20.** The area of the floor of a class room is 2880 sq.m. If its length is 60m, find its breadth and the perimeter.
- **21.** The perimeter of a rectangular garden is 160m. Its breadth is 30m. Find the cost of leveling it at the rate of Rs. 2.50 per sq.m.
- 22. A rectangular plot is 130m long and 70m broad. Find the cost of fencing it at Rs. 3.50 per metre.
- **23.** The cost of levelling a rectangular football ground is Rs. 27,000 at the rate of Rs. 500 per Are. If the breadth of the ground is 60m find its length.
- **24.** The length of a rectangular field is 180 m and its breadth is 120 m. Sandhya walks round the field 5 times, find the distance she covers?
- **25.** Ramesh bought a square plot of side 50m. Adjacent to this Daniel bought a rectangular plot of length 60 m and breadth 40 m for the same price. Find out who is benefitted more.
- **26.** Length of a rectangle is three times its breadth. Perimeter of the rectangle is 40cm. Find its length and width.
- **27.** Tahir measured the distance around a square field as 200 rods (*lathi*). Later he found that the length of this rod was 140cm. Find the side of this field in metres.
- **28.** The length of a rectangular field is twice its breadth. Jamal jogged around it four times and covered a distance of 6km. What is the length of the field?
- **29.** Length of a rectangular field is 250m and width is 150m. Anuradha runs around this field 3 times. How far did she run? How many times she should run around the field to cover a distance of 4km?
- **30.** Bajinder runs ten times around a square track and covers 4km. Find the length of the track.
- **31.** The lawn in front of Molly's house is 12m× 8m, whereas the lawn in front of Dolly's house is 15m×5m. A bamboo fencing is built around both the lawns. How much fencing is required for both?
- **32.** The perimeter of a regular pentagon is 1540cm. How long is its each side?
- **33.** The perimeter of a triangle is 28cm. One of it's sides is 8cm. Write all the sides of the possible isosceles triangles with these measurements.

- **34.** Base of a tent is a regular hexagon of perimeter 60cm. What is the length of each side of the base?
- **35.** In the below figure, all triangles are equilateral and AB = 8 units. Other triangles have been formed by taking the mid points of the sides. What is the perimeter of the figure?



- **36.** What is the length of outer boundary of the park shown in the above right figure? What will be the total cost of fencing it at the rate of Rs 20 per metre? There is a rectangular flower bed in the center of the park. Find the cost of manuring the flower bed at the rate of Rs 50 per square metre.
- **37.** The length of an aluminium strip is 40cm. If the lengths in cm are measured in natural numbers, write the measurement of all the possible rectangular frames which can be made out of it. (For example, a rectangular frame with 15cm length and 5cm breadth can be made from this strip.)
- **38.** In an exhibition hall, there are 24 display boards each of length 1m 50cm and breadth 1m. There is a 100m long aluminium strip, which is used to frame these boards. How many boards will be framed using this strip? Find also the length of the aluminium strip required for the remaining boards.
- **39.** In the above question, how many square metres of cloth is required to cover all the display boards? What will be the length in m of the cloth used, if its breadth is 120cm?
- **40.** Length of a rectangular field is 6 times its breadth. If the length of the field is 120cm, find the breadth and perimeter of the field.
- **41.** Anmol has a chart paper of measure $90\text{cm} \times 40\text{cm}$, whereas Abhishek has one which measures $50\text{cm} \times 70\text{cm}$. Which will cover more area on the table and by how much?
- **42.** A rectangular path of 60m length and 3m width is covered by square tiles of side 25cm. How many tiles will there be in one row along its width? How many such rows will be there? Find the number of tiles used to make this path?
- **43.** How many square slabs each with side 90cm are needed to cover a floor of area 81sqm.
- **44.** The length of a rectangular field is 8m and breadth is 2m. If a square field has the same perimeter as this rectangular field, find which field has the greater area.
- **45.** Parmindar walks around a square park once and covers 800m. What will be the area of this park?

- **46.** The side of a square is 5cm. How many times does the area increase, if the side of the square is doubled?
- **47.** Amita wants to make rectangular cards measuring 8cm × 5cm. She has a square chart paper of side 60cm. How many complete cards can she make from this chart? What area of the chart paper will be left?
- **48.** A wire is cut into several small pieces. Each of the small pieces is bent into a square of side 2cm. If the total area of the small squares is 28 square cm, what was the original length of the wire?
- **49.** Perimeter of a square and a rectangle is same. If a side of the square is 15cm and one side of the rectangle is 18cm, find the area of the rectangle.
- **50.** Total cost of fencing the park shown in below figure is Rs 55000. Find the cost of fencing per metre.



- **51.** Three squares are joined together as shown in above right sided figure. Their sides are 4cm, 10cm and 3cm. Find the perimeter of the figure.
- **52.** A magazine charges Rs 300 per 10sqcm area for advertising. A company decided to order a half page advertisment. If each page of the magazine is 15cm × 24cm, what amount will the company has to pay for it?
- **53.** The perimeter of a square garden is 48m. A small flower bed covers 18sqm area inside this garden. What is the area of the garden that is not covered by the flower bed? What fractional part of the garden is covered by flower bed? Find the ratio of the area covered by the flower bed and the remaining area.
- **54.** Divide the park shown in Fig. 6.17 of question 40 into two rectangles. Find the total area of this park. If one packet of fertilizer is used for 300sqm, how many packets of fertilizer are required for the whole park?

- **55.** The area of a rectangular field is 1600sqm. If the length of the field is 80m, find the perimeter of the field.
- **56.** The area of each square on a chess board is 4sqcm. Find the area of the board. (a) At the beginning of game when all the chess men are put on the board, write area of the squares left unoccupied. (b) Find the area of the squares occupied by chess men.
- **57.** (a) Find all the possible dimensions (in natural numbers) of a rectangle with a perimeter 36cm and find their areas.
 - (b) Find all the possible dimensions (in natural numbers) of a rectangle with an area of 36sqcm, and find their perimeters.
- **58.** A wire is in the shape of a square of side 10 cm. If the wire is rebent into a rectangle of length 12 cm, find its breadth. Which encloses more area, the square or the rectangle?
- **59.** The area of a square and a rectangle are equal. If the side of the square is 40 cm and the breadth of the rectangle is 25 cm, find the length of the rectangle. Also, find the perimeter of the rectangle.
- **60.** The length and the breadth of a rectangular piece of land are 500 m and 300 m respectively. Find (i) its area (ii) the cost of the land, if 1 m2 of the land costs Rs 10,000.
- **61.** Find the breadth of a rectangular plot of land, if its area is 440 m2 and the length is 22 m. Also find its perimeter.
- **62.** The perimeter of a rectangular sheet is 100 cm. If the length is 35 cm, find its breadth. Also find the area.
- **63.** What will happen to the area of a rectangle if (i) its length is doubled and breadth is trebled (ii) its length nad breadth are doubled?
- **64.** What will happen to the area of a square if its side is (i) doubled (ii) halved?
- **65.** Find the perimeter of a rectangular field whose length is four times its width and which has an area equal to 30976 cm².