Programs | Assignment sheet-2

1.   The perimeter of a rectangle is 230 cm. If the length of the rectangle is 70 cm, find its breadth and area.

2. The area of a rectangle is 96 cm². If the breadth of the rectangle is 8 cm, find its length and perimeter.

3. How many tiles whose length and breadth are 13 cm and 7 cm respectively are needed to cover a rectangular region whose length and breadth are 520 cm and 140 cm?

4. Find the cost of tiling a rectangular plot of land 300 m long and 150 m wide at the rate of $6 per hundred square m.

5. If it costs 1600 rs. to fence a rectangular park of length 20 m at the rate of 25 rs. per m², find the breadth of the park and its perimeter. Also, find the area of the field.

6.Find the area of a triangle, sides of which are 10 cm and 9 cm and the perimeter 36 cm.

7. Find the height of a triangle whose base is 50 cm and whose area is 500 cm².

 8. Find the base of a triangle whose altitude is 20 cm and area is 0.8 m².

9. Find the area of an equilateral triangle, the length of whose sides is 12 cm.

10. Find the area of an isosceles right angled triangle of equal sides 15 cm each.

11. The base and height of a triangle are in the ratio 8 : 5 and its area is 320 m². Find the height and base of the triangle.

12. Find the area of a right angled triangle whose hypotenuse is 13 cm and one of its sides containing the right angle is 12 cm. Find the length of the other side.

13. The area of a right triangle is 184 cm² and one of its legs is 16 cm long. Find the length of other leg.

14. The length of one of the diagonals of a field in the form of a quadrilateral is 46 m. The perpendicular distance of the other two vertices from the diagonal are 13 m and 10 m, find the area of the field.

15. Shelly has a rectangular garden of length 22 m and breath 15 m. Her friend Rachel has a square garden of side 21 m. Whose garden is bigger and by how much?

16. Tina wants a new carpet for her rectangular dining room. Her dining room is a 5 meters by 7 meters rectangle. How much carpet does she need to buy to cover her entire dining room.

17. Luci is making a display board for the school exhibition. The display board is a 3 m by 2 m rectangle. He needs to add a ribbon border around the entire display board. What is the length of ribbon that he needs?

18. Ron jogs around a rectangular park of length 50 m and breadth 30 m. If he takes 10 rounds of the park each day, how much distance does he cover in a day in km?

19. A cube with an edge of 7 cm and a cuboid measuring 7 cm × 4 cm × 8 am are kept on a table. Which shape has more volume?

20. What is the volume of a brick of ice-cream with length 25 cm, breadth 10 cm and height 8 cm?

21. A brick measures 15 cm in length, 8 cm in breadth and 5 cm in height. How many bricks will be used to make a wall of length 15 m, breadth 10 m and height 8 metres?

22. A pond is 50 m long, 30 m wide and 2 m deep. Find the capacity of the pond in cubic metre.

23. Find the number of cubical boxes of cubical side 3 cm which can be accommodated in carton of dimensions 15 cm × 9 cm × 12 cm.

24. How many bricks each 25 cm long, 10 cm wide and 7.5 cm thick will be required for a wall 20 m long, 2 m high and 0.75 m thick? If bricks sell at $900 per thousand what will it cost to build the wall?

25. 100 bricks of length 24 cm and breadth 15 cm are used to tile a path of a garden. What is the area of the path?

26. How many bricks will be required to lay a path 120 m long and 2.4 m breadth if a brick is 24 cm long and 15 cm wide?

27. Find the cost of tiling a dining room 20 m long and 15 m wide at the rate of $ 5 per square m.

28. A carpet is 5 m long and 4 m wide. Find its price at the rate of $ 205 per square meter.

29. How many square tiles of side 10 cm will be required to tile a floor measuring 800 cm by 900 cm?

30. How many tiles of length 5 cm and breadth 8 cm are needed to tile the floor of a bed room 200 cm long and 400 cm wide?

31. What will be the area of a square with perimeter 200 m?

32. A square garden with a side length of 150 m has a square swimming pool in the very centre with a side length of 25 m . Calculate the area of the garden.

33. A rectangular garden has dimensions of 30 m by 20 m and is divided in to 4 parts by two pathways that run perpendicular from its sides. One pathway has a width of 3 m and the other, 4 m. Calculate the total usable area of the garden.

34. A wooded area is in the shape of a a trapezoid whose bases measure 128 m and 92 m and its height is 40 m. A 4 m wide walkway is constructed which runs perpendicular to the two bases. Calculate the area of the wooded area after the addition of the walkway.

35. Find the surface area of the cylindrical solid whose radius is 7.7 cm and height is 12 cm.

36. What is the surface area of a cylinder if the diameter is 15m height is 7m?

37. The surface of the cylinder is 149 cm². The cylinder height is 6 cm. What is the diameter of this cylinder?

38. The cylinder has a volume of 1287. The base has a radius 10. What is the area of the surface of the cylinder?

39. Find the surface of the cylinder if its diameter is 12 centimeters and its height is 9 centimeters.

40. Calculate the volume of the cylinder: r = 5 cm, h = 9 cm

41. I need to calculate the cylinder volume with a height of 50 cm and a diameter of 30 cm.

42. Find the Volume of Cylinder whose diameter is 2.25cm

43. Find the cost of polishing the base of a cone whose height is 4cm and slant height 5 cm

44. Find the 28th term of an Arithmetic Progression -21 -18 -15 -12 . . . . .

45. Find the sum of 28 terms of an Arithmetic Progression -21 -18 -15 -12 . . . . .