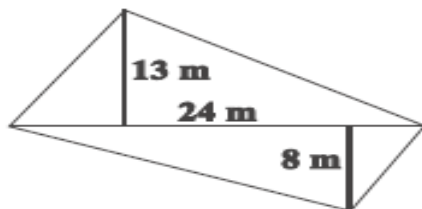


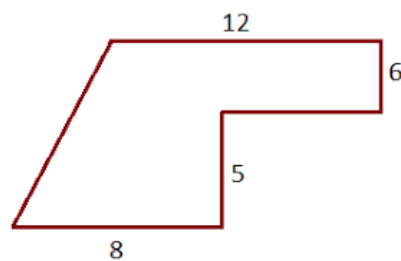
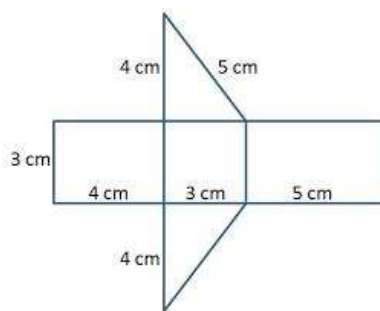
NISCORT FATHER AGNEL SCHOOL, VAISHALI (2017-18)
SELF LEARNING WORKSHEET
CLASS-VIII
MENSURATION

1. The area of a trapezium is 352 cm^2 and the distance between its parallel sides is 16 cm. If one of the parallel sides is of length 25 cm, find the length of the other.
2. The parallel sides of a trapezium are 25 cm and 13 cm; its nonparallel sides are equal, each being 10 cm. Find the area of the trapezium.
3. ABCD is a trapezium in which $AB \parallel DC$, $AB = 78 \text{ cm}$, $CD = 52 \text{ cm}$, $AD = 28 \text{ cm}$ and $BC = 30 \text{ cm}$. Find the area of the trapezium.
4. The area of a trapezium is 1080 cm^2 . If the lengths of its parallel sides are 55.6 cm and 34.4 cm, find the distance between them.
5. The area of a trapezium is 384 cm^2 . Its parallel sides are in the ratio 3: 5 and the perpendicular distance between them is 12 cm. Find the length of each of the parallel sides.
6. The base and height of the triangle are in the ratio 3: 2. If the area of the triangle is 243 cm^2 find the base and height of the triangle.
7. The base of the parallelogram is thrice its height. If the area is 192 cm^2 , find the base and height.
8. A parallelogram has sides 12 cm and 9 cm. If the distance between its shorter sides is 8 cm, find the distance between its longer side.
9. Find the area of the rhombus having each side equal to 17 cm and one of its diagonals equal to 16 cm.
10. Find the altitude of the rhombus whose area is 315 cm^2 and its perimeter is 180 cm.
11. The floor of building consists of 2000 tiles which are rhombus shaped and each of its diagonals are 40 cm and 25 cm in length. Find the total cost of polishing the floor, if the cost per m^2 is Rs.5.
12. A verandah 1.25 m is constructed all along outside of a room 7.5 m long and 5 m wide.
13. Find:
 - (a) the area of the verandah.
 - (b) the cost of cementing the floor of the verandah at the rate of Rs.15 per m^2 .
14. If the volume of a room is 792 m^3 and the area of the floor is 132 m^2 , find the height of the room.
15. The diagonal of following quadrilateral ABCD is 24 m long, and length of perpendiculars dropped on diagonal are 13 m and 8 m. Find the area of quadrilateral.

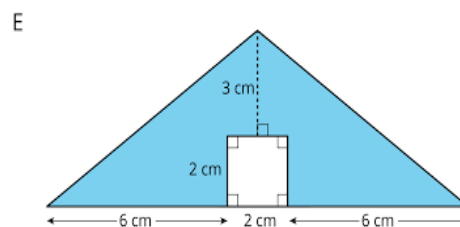
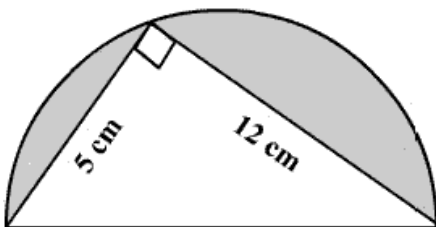


16. Some workers are painting a hall with length, breadth and height of 50 m, 25 m and 8 m respectively. If they can paint 50 m^2 area from one liter of paint, find the amount of paint required to paint the walls and ceiling of hall.
17. The circumference of the base of a right circular cylinder is 176 cm and it is 1 m high. Find the lateral surface area of the cylinder.
18. A cylindrical pillar is 50 cm in diameter and 3.5 m high. Find the cost of white washing its curved surface at the rate of Rs 1.25 per square metre.

19. The diameter of a roller is 80 cm and its length is 126 cm. It takes 750 complete revolutions moving once over to level a playground. Find the area of the playground.
20. A room is 5.5 m long, 4 m wide and 3.5 m high. Find the cost of papering its walls with paper 90 cm wide at Rs 1.20 per metre.
21. The area of a rhombus is equal to the area of a triangle with base 24.8 cm and altitude 16.5 cm. If one of the diagonals of the rhombus is 22 cm, find the other diagonal.
22. A cardboard box open from the top is 1.5 m long, 1.25 m wide and 65 cm deep. Find the area of cardboard required for making the box and the cost of cardboard required at Rs 25 per sq m.
23. The sum of the radius of the base and height of a cylinder is 37m. If the total surface area of the cylinder is 1628 m^2 , find the circumference of its base.
24. Find the area of the given polygon-:



25. How many small cubes with edge of 20cm each can be accommodated in a cubical box of 2m edge?
26. A metal sheet 27m long, 8cm broad and 1 cm thick is melted into a cube. Find the side of the cube.
27. Four horses are tethered with equal ropes at 4 corners of a square field of 70 m so that they can reach one another. Find the area left ungrazed by the horses
28. Mukesh walks around a circular track of radius 14 m with a speed of 4 km/hr. If he takes 20 rounds of the track, for how long does he walk?
29. Find the area of the shaded region



30. A rectangular sheet of dimensions 25cm x 7cm is rotated about its longer side. Find the volume and the whole surface area of the solid thus generated.
31. What will happen to the volume of the cube, if its edge is a) tripled b) reduced to one-fourth?
32. The length, breadth and height of a cuboidal reservoir is 7m, 6m and 15 m respectively. 8400 litres of water is pumped out from the reservoir. Find the fall in the water level in the reservoir.