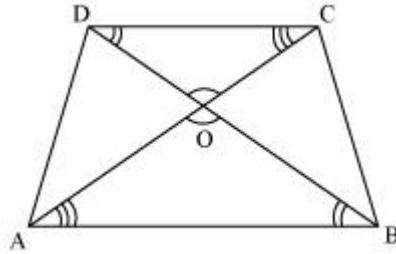


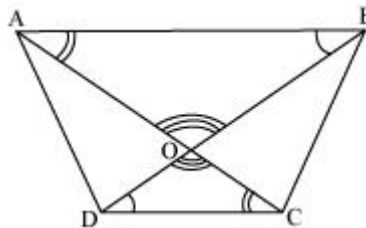
# Year 9 Measurement Worksheet



1. The diagonals of a trapezium ABCD, with  $AB \parallel CD$ , intersect each other at the point O. If  $AB = 2CD$ , then find the ratio of the area of  $\Delta AOB$  to the area of  $\Delta COD$ .

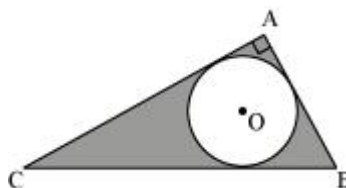


2. In a trapezium ABCD, AC and BD are intersecting at O.  $AB \parallel DC$  and  $AB = 2CD$ . If area of  $\Delta AOB = 84 \text{ cm}^2$ , find the area of  $\Delta COD$ .



3. In Fig. 8, ABC is a right triangle right angled at A. Find the area of shaded region if  $AB = 6 \text{ cm}$ ,  $BC = 10 \text{ cm}$  and O is the centre of the incircle of  $\Delta ABC$ .

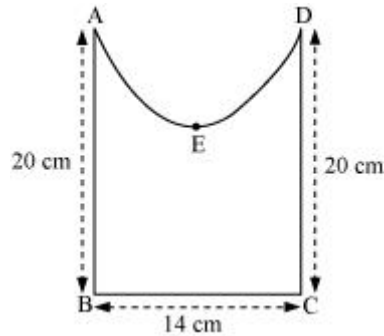
(take  $\pi = 3.14$ )



## Year 9 Measurement Worksheet



4. Find the perimeter of the given figure, where AED is a semi-circle and ABCD is a rectangle.



5. A copper wire when bent into the form of a square encloses an area 121 sq. cm. If the same wire is bent in the form of a circle, find the area of the circle. Ans 154 sq. cm
6. Spherical marbles of diameter 1.4 cm are dropped into cylindrical vessel containing some water and are fully submerged. The diameter of the vessel is 7 cm. How many marbles have been dropped in it if the water rises by 5.6 cm? [Ans. 150]
7. Four cubes each of sides 5 cm are joined end to end. Find the surface area of the resulting cuboid. A
8. Find the length of longest bamboo which can be placed in a room of 12m x 4m x 3m.
9. A cubical box has each edge 10 cm and another cuboidal box is 12.5 cm long, 10 cm wide and 8 cm high. (i) Which box has the greater lateral surface area and by how much? (ii) Which box has the smaller total surface area and by how much?
10. A rectangular field has a flower garden which is 18 feet by 6 feet. If the garden covers 30 percent of the field, what is the area, in square feet, of the field?