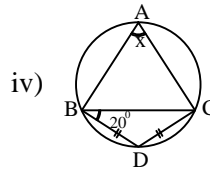
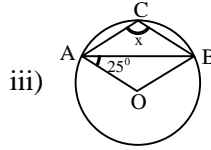
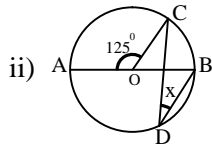
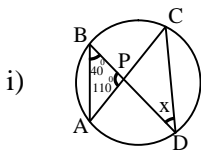
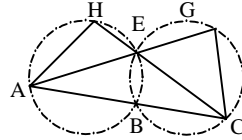


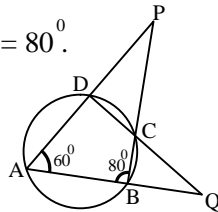
14) Find the value x from the following figures.



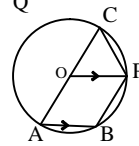
15) In the figure ABC, AEG and HEC are straight lines. Prove that $\angle AHE$ and $\angle EGC$ are supplementary.



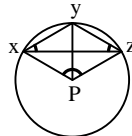
16) In the figure $\angle A = 60^\circ$ and $\angle ABC = 80^\circ$. Find $\angle DPC$ and $\angle BQC$.



17) In the figure, O is the center of the circle and $AB \parallel OP$. Prove that $PC = PB$.



18) In the figure P is the center of the circle. Prove that $\angle XPZ = 2(\angle xzy + \angle yxz)$



19) Construct a triangle with base length 5 cm, sum of the other two sides 7.8 cm and one base angle of 60° .

20) Construct a triangle with base length 7.5 cm, the difference of the other two sides 2.5 cm and one base angle is 45° .

21) Construct $\triangle ABC$ with perimeter 8 cm and the angles in the ratio 3: 4 : 5.

22) Construct $\triangle ABC$, in which $BC = 5$ cm, $\angle C = 30^\circ$ and $AB - AC = 2$ cm.

23) A swimming pool is 30 m in length 15 m in breadth and 4 m in deep. Find the cost of cementing its floor and walls at the rate of ₹ 12 per m^2 .

24) The cost of papering the four walls of a room at 90 paise / m^2 is ₹ 202.50. The height of the room is 5 m. Find the length and breadth of the room if they are in the ratio 4:1.

25) Water in a canal, 30 dm wide and 12 dm deep, is flowing at a speed of 20 km / hr. How much area will it irrigate in 30 minutes, if 9 cm of standing water is desired?

26) The ratio of the C S A and T S A of cylinder is 1: 2. If the TSA is 616 cm^2 find the volume of the cylinder.

27) The difference between the outer surface area and inner surface area of a cylindrical metallic pipe 14 cm long is 44 cm^2 . If the pipe is made of 99 cm^3 of metal, find the outer and inner radii of the pipe.

28) A piece of paper having the form of a quadrant of a circle of diameter 28 cm is rolled up so as to form a cone. Find the i) radius of the base ii) curved surface area and iii) volume of the cone.

29) Three solid spheres of iron whose diameters are 2 cm, 12 cm and 16 cm respectively are melted into a single solid sphere. Find the T.S.A. of the new sphere