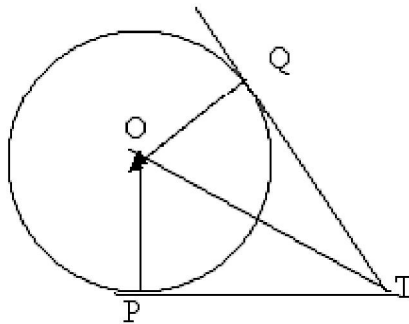
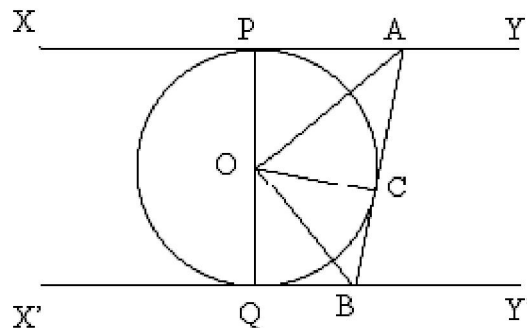


TIME – 1hr

- Find the maximum length of the rod that can be kept in cuboidal box of sides 30cm, 24cm and 18cm.
- The curved surface area of a cylinder is 216π . If its height is 18 cm then what will be its radius?
- 60 circular plates of equal radius are placed on each other to form a cylinder. Find height of cylinder if thickness of each plate is $\frac{3}{4}$ cm.
- Curved surface area of a cone is thrice and curved surface area of the other. Slant height of second cone is thrice the slant height of first. Find ratio of their radii.
- A well of 2m diameter is dug 14m deep on the ground. Find the volume of earth taken out.
- A boy recasted a cone of 4cm height and 27cm radius into a solid sphere. Find the radius of the sphere.
- In the following figure, if TP and TQ are the two tangents to a circle with centre O so that angle POQ = 110° , then angle PTQ is equal to



- Prove that the tangents drawn at the ends of a diameter of a circle are parallel.
- Prove that the perpendicular at the point of contact to the tangent to a circle passes through the centre.
- Two concentric circles are of radii 5 cm and 3 cm. Find the length of the chord of the larger circle which touches the smaller circle.
- In the given figure, XY and X'Y' are two parallel tangents to a circle with centre O and another tangent AB with point of contact C intersecting XY at A and X'Y' at B. Prove that angle AOB = 90°



- 1800cm or $30\sqrt{2}$ cm
- 6cm
- 45cm
- 9:1
- $44\pi^3$
- 9cm