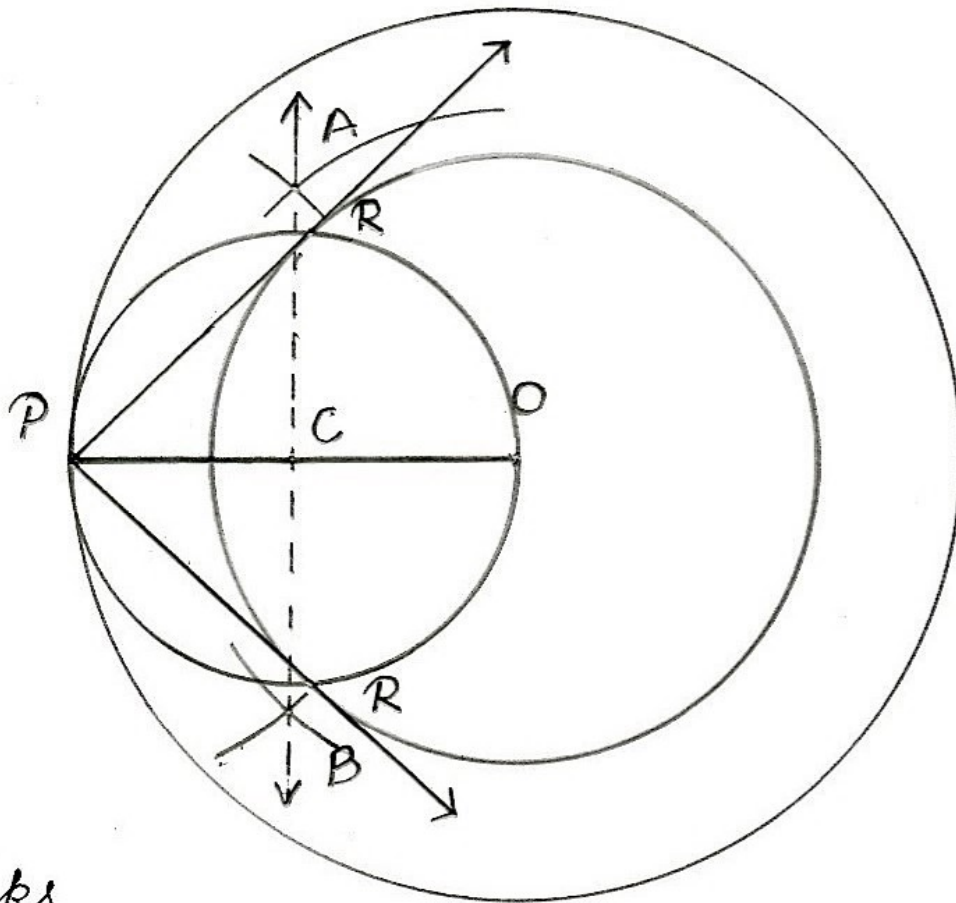


NCERT Solutions by Dev Anoop (Bathinda)
 Constructions Ex. 11.2, Q. 2



Steps

- ① draw a \odot with centre O and radius $= 6\text{cm}$
- ② draw a \odot with centre O and radius $= 4\text{cm}$
- ③ take a point P on bigger \odot and join OP
- ④ draw AB perpendicular bisector of OP intersecting it at C
- ⑤ with centre C and radius $= CP$ or CO draw a \odot intersecting smaller \odot at Q and R respectively
- ⑥ join PQ, PR
- ⑦ PQ, PR are required tangents

$$PQ = PR = 4.6\text{cm}$$

$$\text{By calculation } \angle PQO = 90^\circ \therefore PQ = \sqrt{OP^2 - OQ^2} = 2\sqrt{5} = 4.46\text{cm}$$