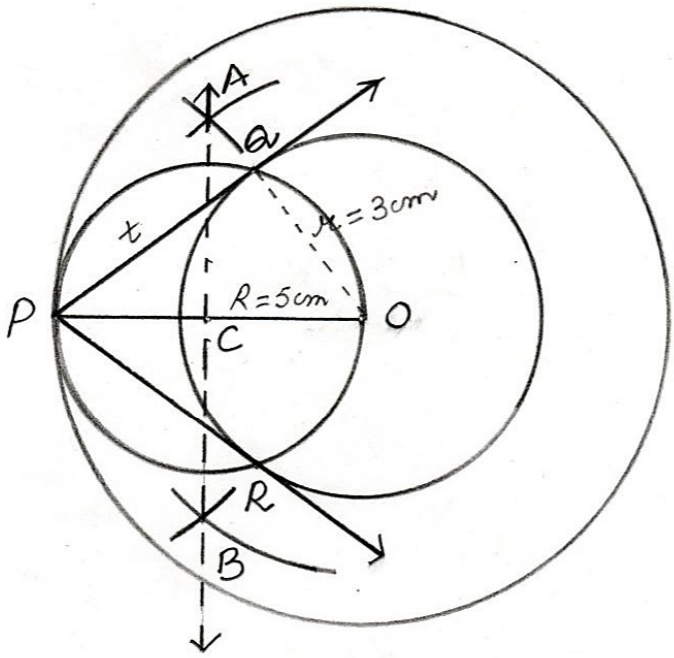

By Calculation

In rt. PQR

$OP^2 = OQ^2 + PQ^2$

$5^2 = 3^2 + t^2$

$\Rightarrow t^2 = 25 - 9$

$\Rightarrow t = \sqrt{16}$

$= 4\text{cm}$

By Measurement

$t = 4\text{cm}$

Steps

1. With centre O and radii 3 cm and 5 cm draw 2 ⊙s
2. take a point P on ⊙ of radius 5 cm and join OP
3. draw AB perpendicular bisector of OP intersecting it at C
4. With centre C and radius = CP or CO draw a ⊙ intersecting smaller ⊙ at Q and R
4. Join PQ and PR
5. PQ and PR are required tangents