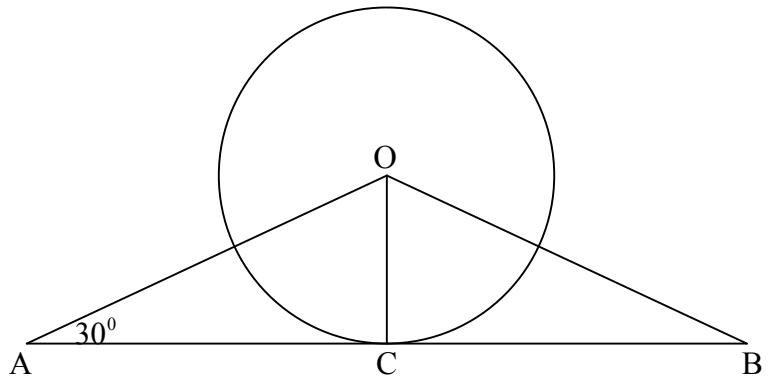


Angles in Circles
S1-S3, National 4

1. Triangle AOB is isosceles.
 AB is a tangent to the circle.
 Angle CAO is 30° .

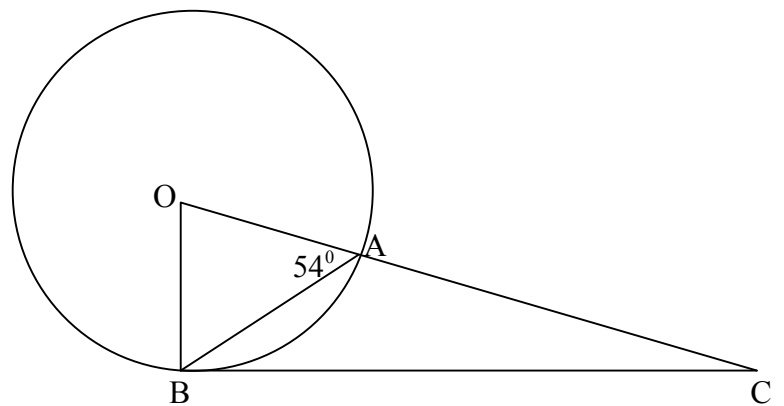
Calculate the size of angle BOC.



2. In the triangle opposite

OB is a radius of the circle
 BC is a tangent to the circle
 Angle OAB = 54° .

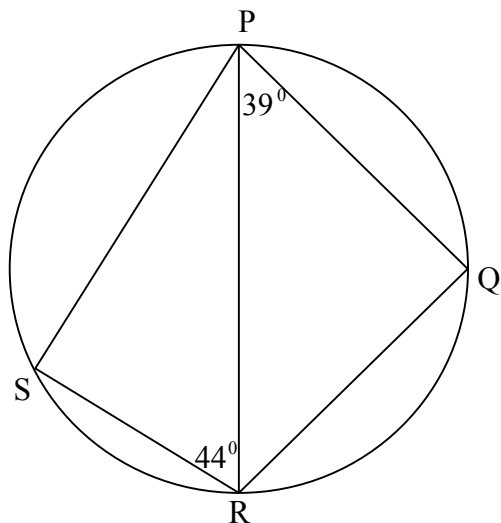
Calculate angle BCA.



3. PR is a diameter of the circle.

Angle PRS is 44°
 Angle QPR is 39° .

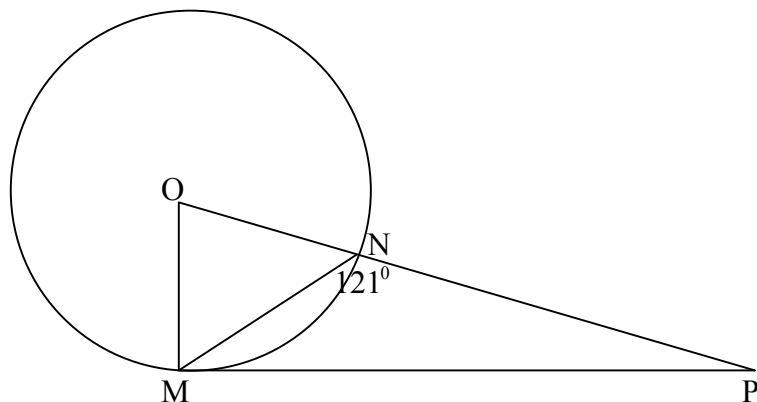
Calculate the size of angle SRQ.



4. In the diagram

OM is a radius of the circle
 MP is a tangent to the circle
 Angle MNP = 121°

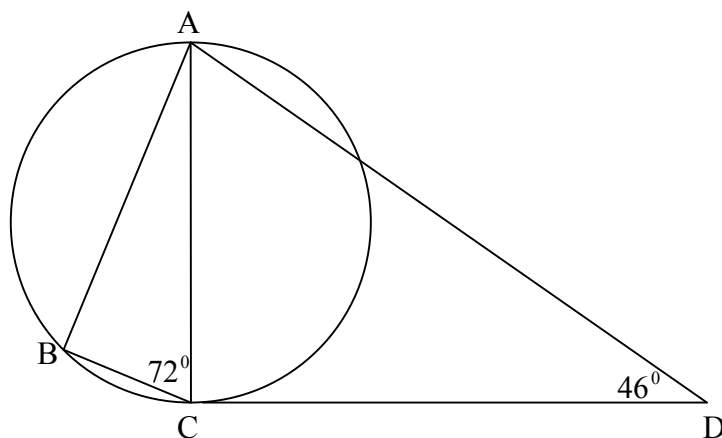
Calculate angle MPN.



5. AC is a diameter of the circle.
 CD is a tangent to the circle.

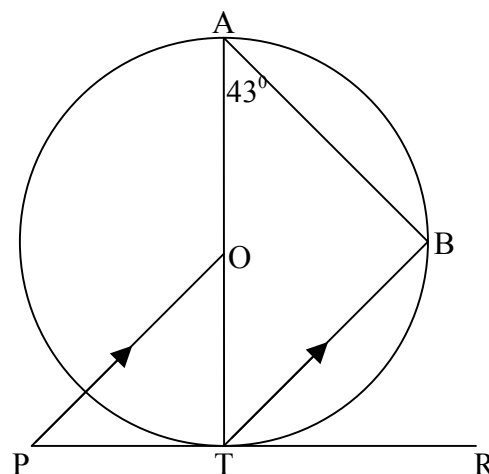
Angle ACB = 72° .
 Angle CDA = 46° .

Calculate the size of angle DAB.



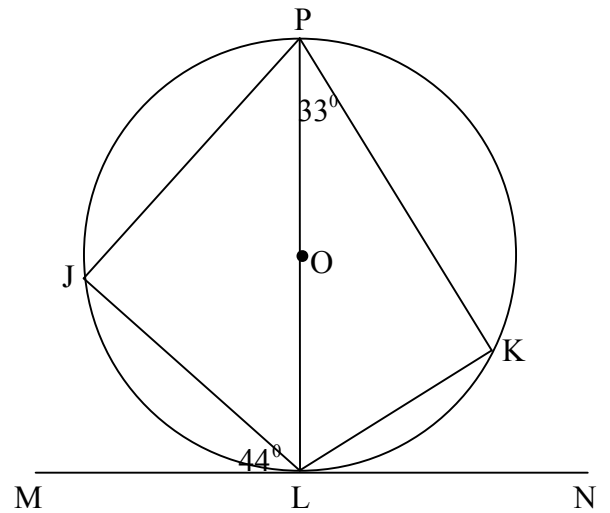
6. PTR is a tangent to the circle, centre O.
 Angle BAT = 43° .
 PO is parallel to TB.

Calculate the size of angle OPT.



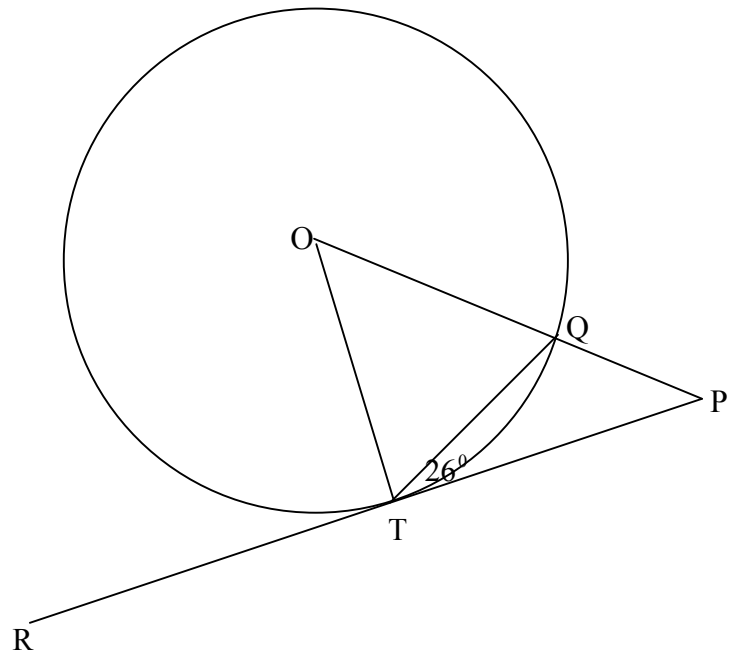
7. MLN is a tangent to the circle, centre O .
 Angle JLM is 44° .
 Angle KPL is 33° .

Find the size of angle KLJ .



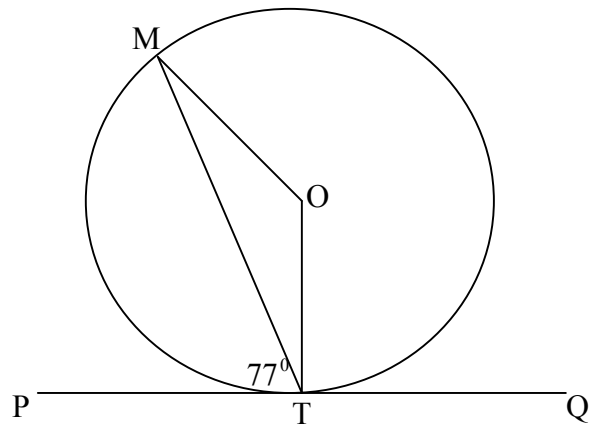
8. RP is a tangent to the circle, centre O .
 Angle QTP is 26° .

Calculate the size of angle OPT .



9. PTQ is a tangent to the circle, centre O .
 Angle $MTP = 77^\circ$.

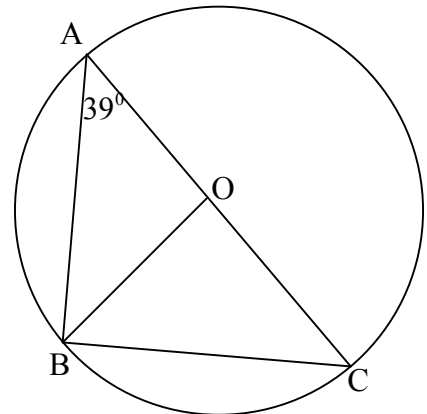
Calculate the size of angle MOT .



10. In the diagram O is the centre of the circle.

AC is a diameter.
 B is a point on the circumference.
 Angle BAC = 39° .

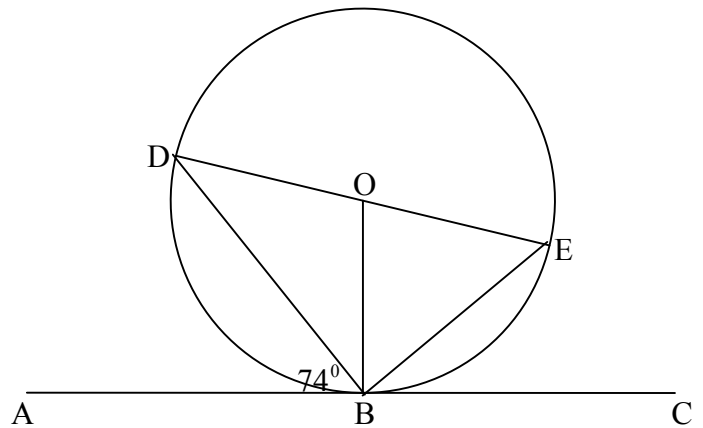
Calculate angle BOC.



11. The diagram shows a circle centre O.
 AC is a tangent to the circle.

Angle DBA is 74° .

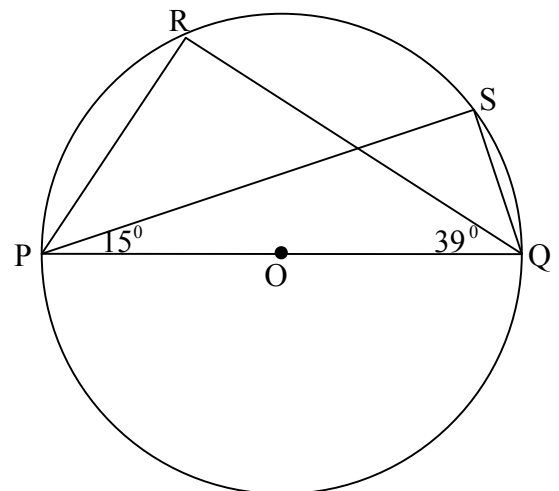
Calculate the size of angle BOE.



12. PQ is a diameter of the circle, centre O.
 R and S are points on the circumference.

Angle SPQ is 15° .
 Angle RQP is 39° .

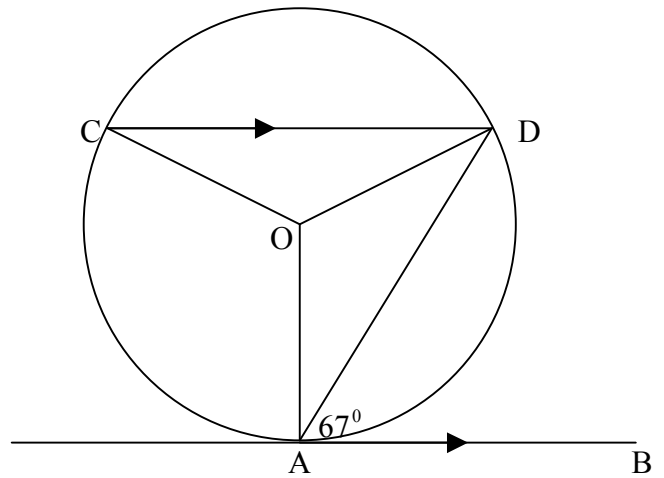
Calculate the size of angle RPS.



13. AB is a tangent to the circle, centre O.
CD is parallel to AB.

Angle DAB = 67° .

Calculate the size of angle CDO.



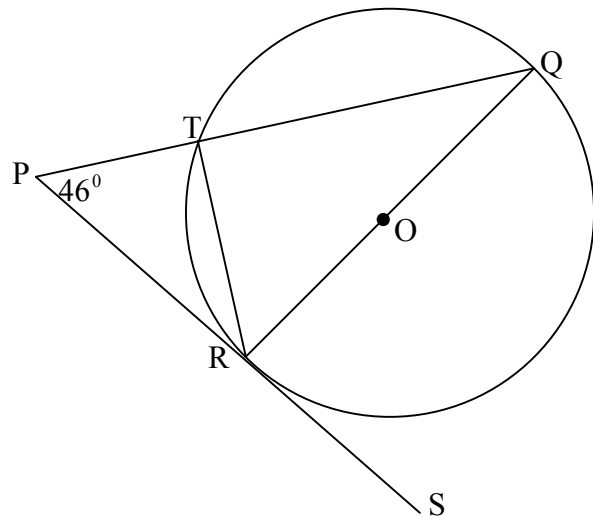
14. A circle, centre O, is shown.

QR is a diameter.

PS is a tangent to the circle.

Angle RPT = 46° .

Calculate the size of angle TRS.



15. AB is the diameter of a circle, centre O.
OC intersects the circle at D.

Angle CBO = 32° .

Angle DAB = 66° .

Calculate the size of angle BCO.

