

WJEC MATHEMATICS

HIGHER
3 TIER TOPICS

CIRCLE THEOREMS

@MrGoreMaths.

Spec 1 – Maths – P1

15. The points A , B and C lie on the circumference of a circle.

The straight line PBT is a tangent to the circle.

$AB = AC$.

$\hat{CBP} = x$, where x is measured in degrees.

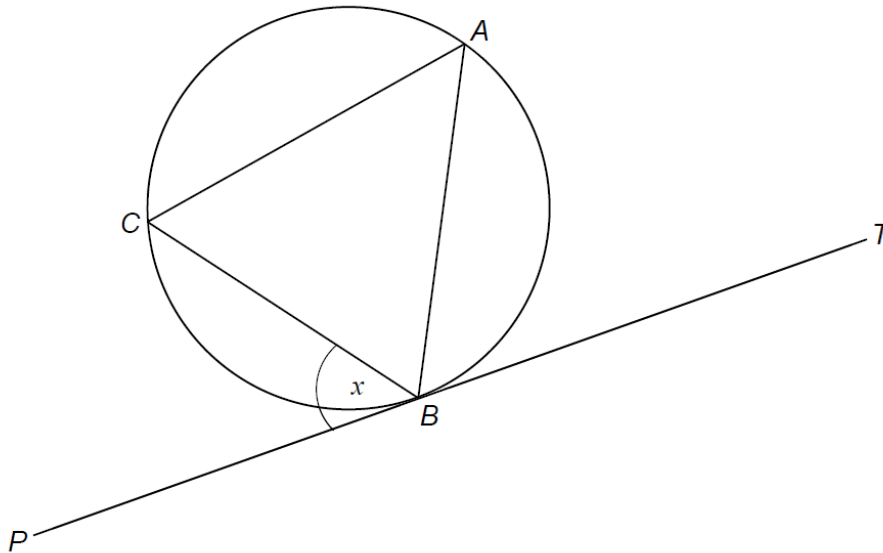


Diagram not drawn to scale

Show, giving reasons in your answer, that the size of \hat{ABC} , in degrees, is $90 - \frac{1}{2}x$.
[4]

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Nov 2016 – Maths – P1

- 13. The points P , Q and R lie on the circumference of a circle, centre O .
 PQ is a diameter of the circle.
The straight line ARB is a tangent to the circle.

$\hat{QRB} = x$, where x is measured in degrees.

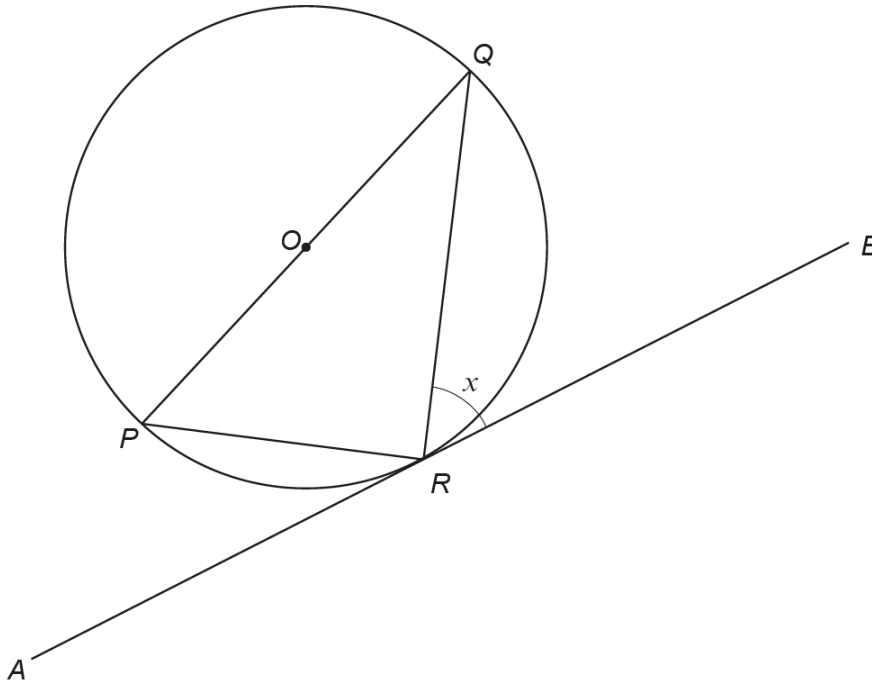


Diagram not drawn to scale

Calculate the size of \hat{PQR} in terms of x .
You must give a reason for each step of your solution.

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Nov 2017 – Maths – P1

12. A , B and C are points on the circumference of a circle.
 XY is a tangent to the circle at the point A .

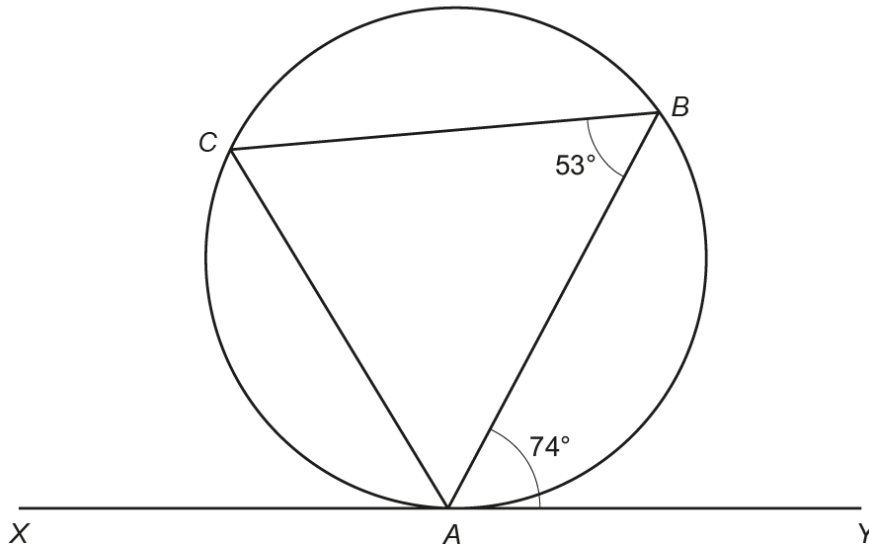


Diagram not drawn to scale

$\widehat{BAY} = 74^\circ$ and $\widehat{ABC} = 53^\circ$.

Prove that triangle ABC is an isosceles triangle.

You must give a reason for any statement that you make or any calculation that you carry out.

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Nov 2017 – Maths – P2

10. Points A , B and C lie on the circumference of a circle, centre O .
 $\widehat{ACB} = 37^\circ$.

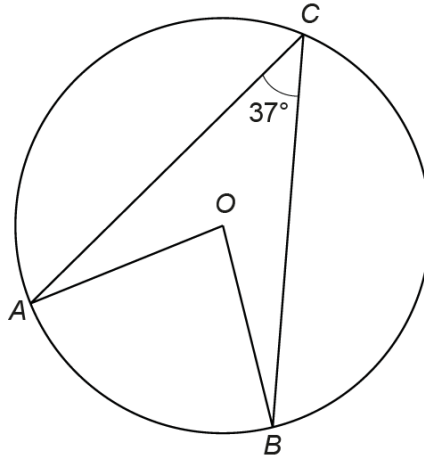


Diagram not drawn to scale

Calculate the size of the reflex angle \widehat{AOB} .

[2]

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