

Circle Theorem Proofs



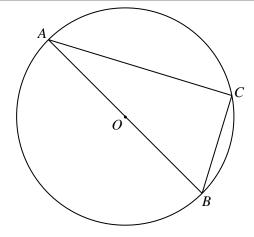


REVISE THIS TOPIC

CHECK YOU'R **ANSWERS**



1



A, B and C are points on the circumference of a circle, centre O. AOB is a diameter of the circle.

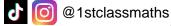
Prove that angle $ACB = 90^{\circ}$

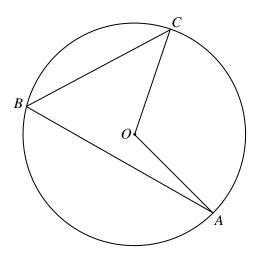


(Total for Question 1 is 4 marks)





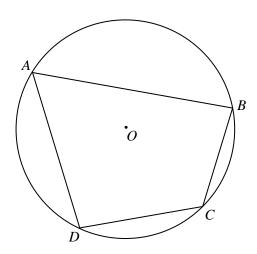




A, B and C are points on the circumference of a circle, centre O.

Prove that angle $AOC = 2 \times \text{angle } ABC$

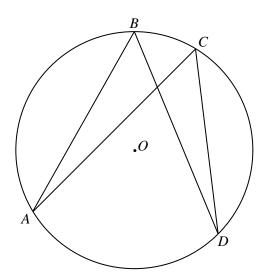




A, B, C and D are points on the circumference of a circle, centre O.

Prove that angle ABC + angle $CDA = 180^{\circ}$





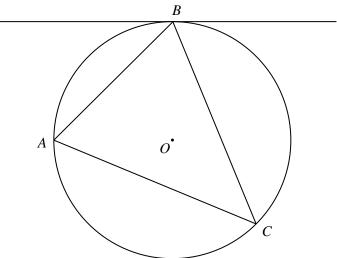
A, B, C and D are points on the circumference of a circle, centre O.

Prove that angle ABD = angle ACD



T

5

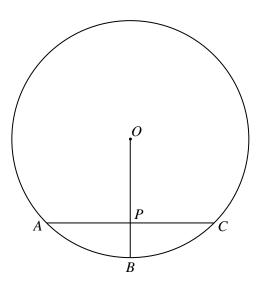


A, B and C are points on the circumference of a circle, centre O. BT is the tangent to the circle at B.

Prove that angle CAB = angle CBT







A, B and C are points on the circumference of a circle, centre O. The lines OB and AC intersect at the point P.

Angle APO = angle OPC = 90°

Prove that AP = PC



(Total for Question 6 is 4 marks)

