1

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

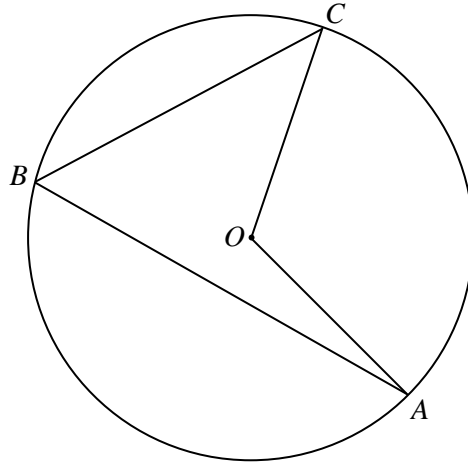Prove that angle $ACB = 90°$

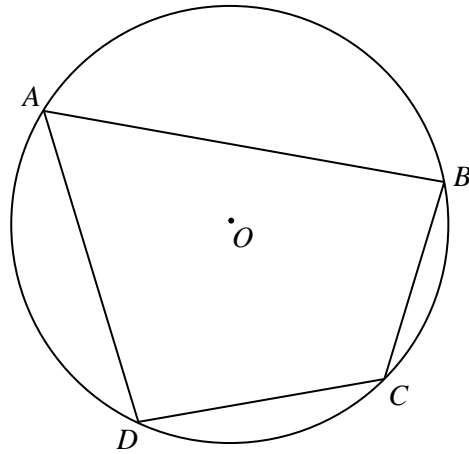**(Total for Question 1 is 4 marks)**

2

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

Prove that angle $AOC = 2 \times$ angle ABC

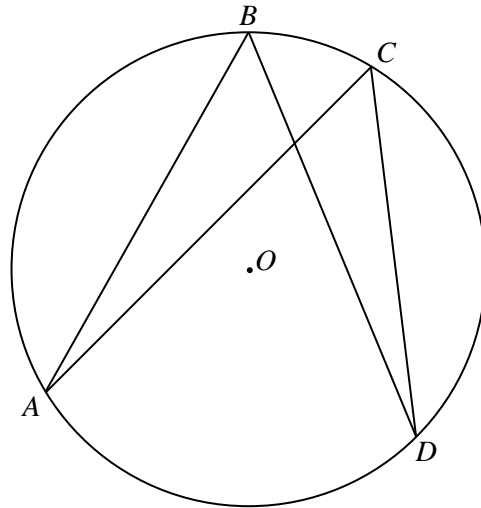**(Total for Question 2 is 4 marks)**

3

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

Prove that angle ABC + angle CDA = 180°

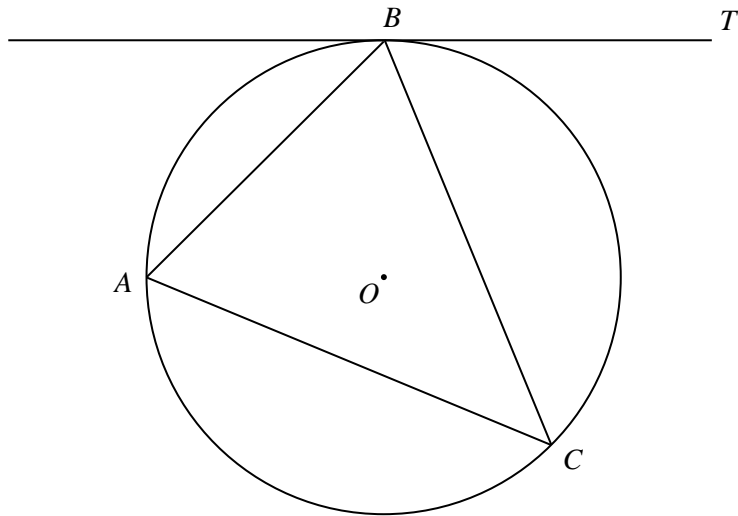**(Total for Question 3 is 4 marks)**

3

Solutions

4

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

Prove that angle ABC = angle ACD

(Total for Question 4 is 2 marks)

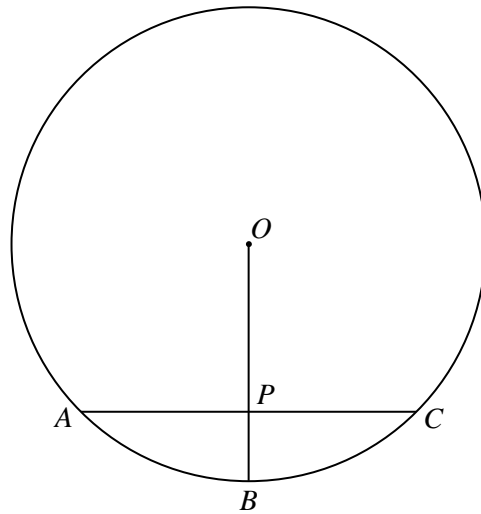Solutions

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*

(Total for Question 5 is 4 marks)

6

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)

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