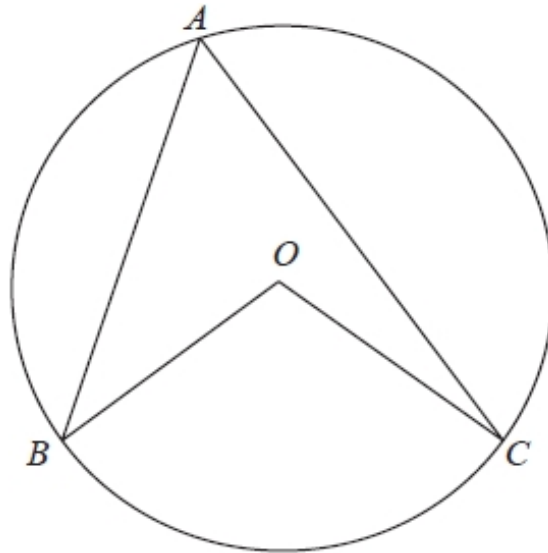


G248 Circle theorems 2

Q1.

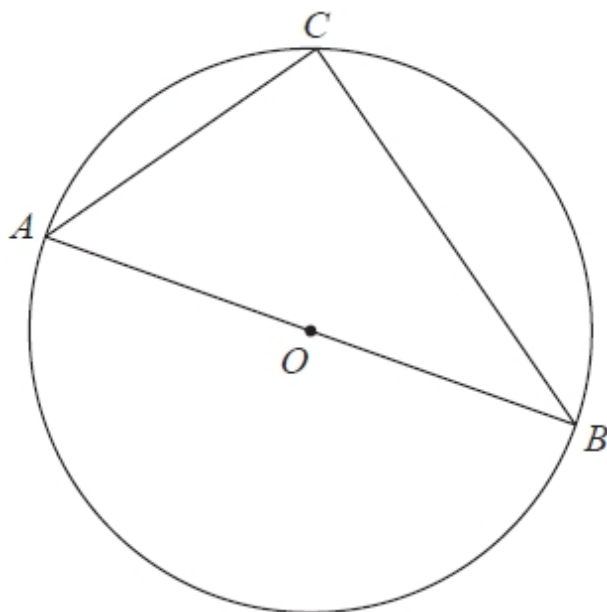
A , B and C are points on the circumference of a circle centre O .



Prove that angle BOC is twice the size of angle BAC .

(Total for question is 4 marks)

Q2.



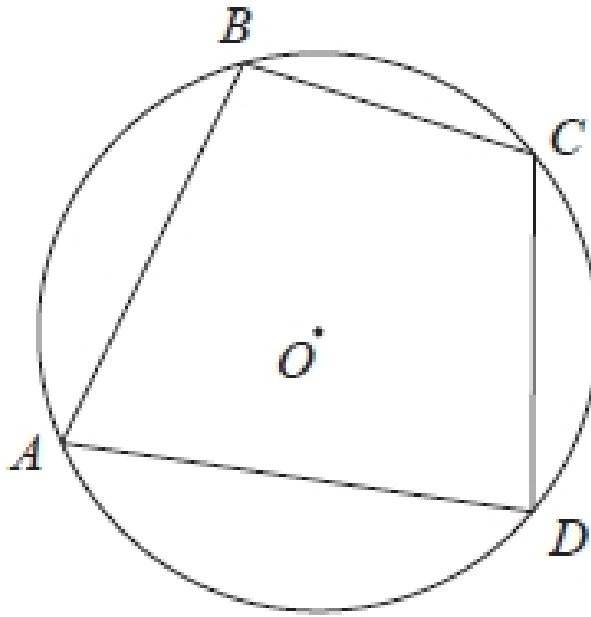
A , B and C are points on the circumference of a circle, centre O .
 AOB is a diameter of the circle.

Prove that angle ACB is 90°

(Total for question = 4 marks)

Q3.

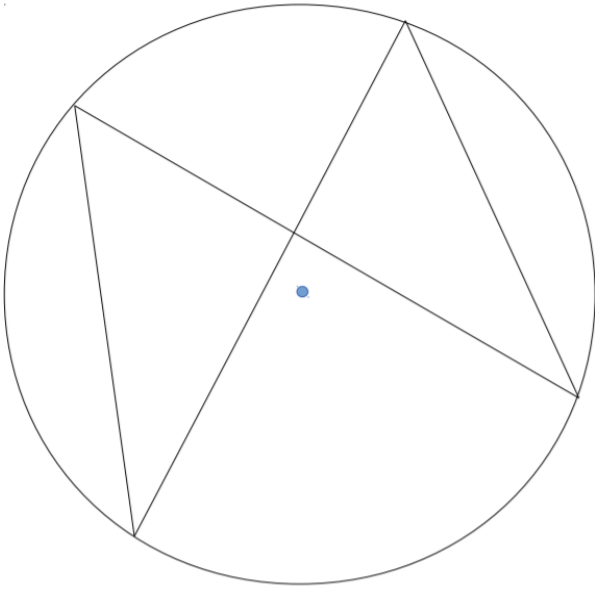
A , B , C and D are points on the circumference of a circle, centre O .



Prove that the sum of angle ABC and angle ADC is 180°

(Total for question = 4 marks)

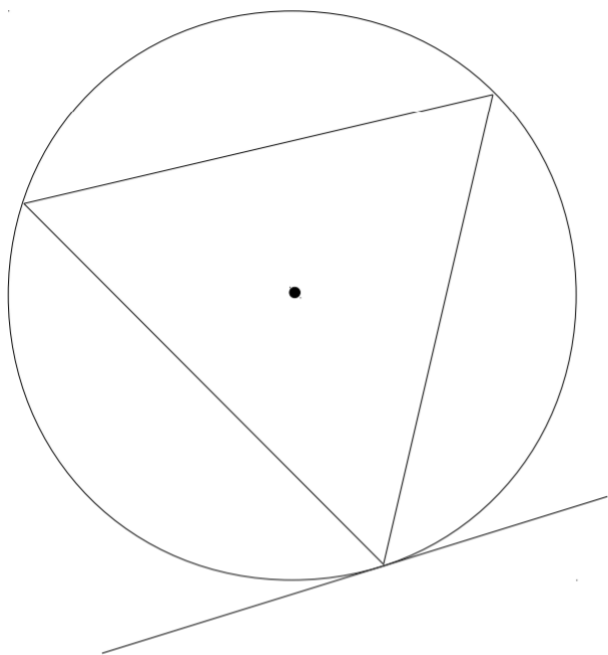
Q4.



Prove that angles in the same segment are equal.

(Total for question = 4 marks)

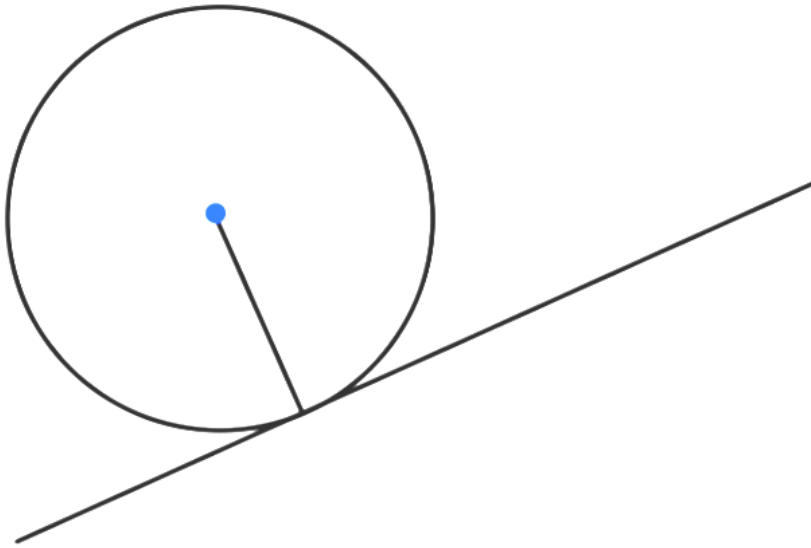
Q5.



Prove the alternate segment theorem.

(Total for question = 4 marks)

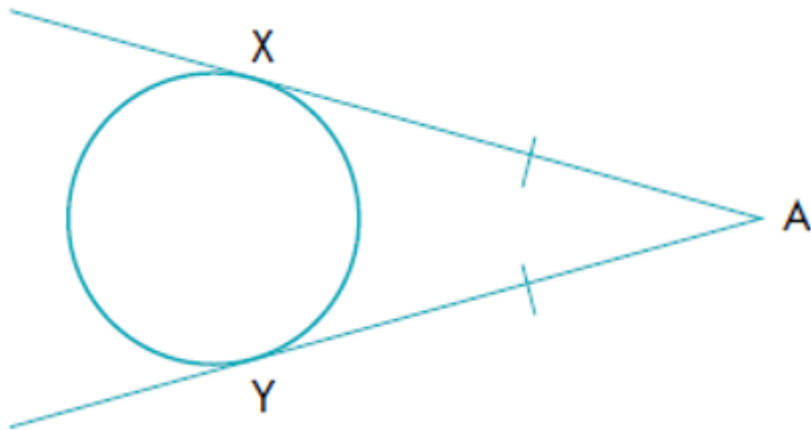
Q6.



Prove that the angle between the radius and the tangent is 90° .

(Total for question = 4 marks)

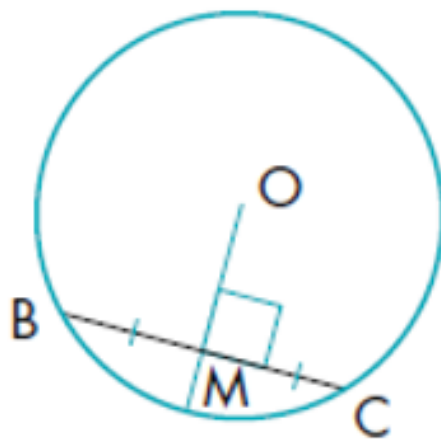
Q7.



Prove that tangents from a point to the circle are equal in length.

(Total for question = 4 marks)

Q8.



Prove that a radius bisects a chord at 90°

(Total for question = 4 marks)