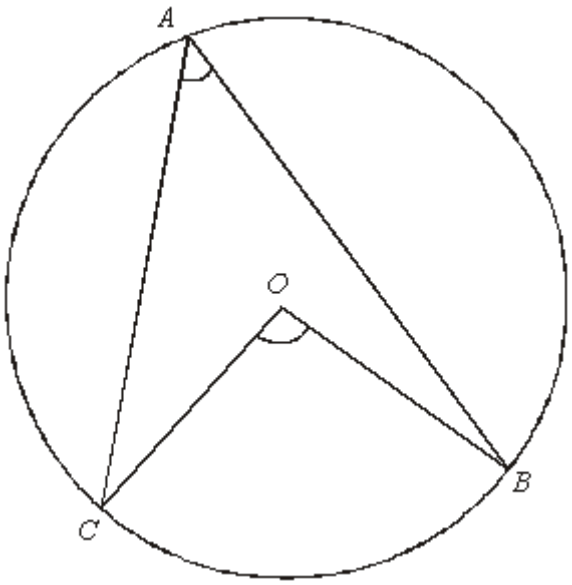
Q1.

Diagram **NOT** accurately drawn

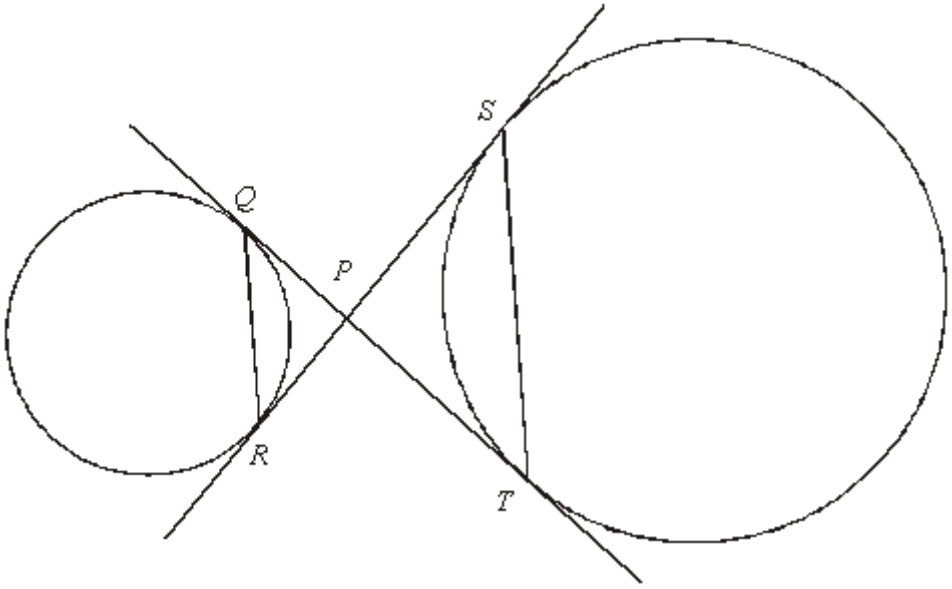


A, *B* and *C* are points on the circle with centre *O*.

Prove that the angle subtended by arc *BC* at the centre of the circle is twice the angle subtended by arc *BC* at point *A*.

(Total 4 marks)

Q2.



Q and *R* are two points on the circumference of a circle.
S and *T* are two points on the circumference of another circle.

QT and *SR* are tangents to both circles.
P is the point of intersection of the two tangents.

Prove that *QR* is parallel to *ST*.

(Total 5 marks)

M1.

	Working	Answer	Mark	Additional Guidance
QWC (i, ii, iii)	Join *AO* and produce to *P* Mark equal angles in isosceles triangle *AOC* or *AOB* Mark angle *COP* as twice angle *CAO* or mark angle *BOP* as twice angle *BAO* Identify angle *A* as half angle *BOC*		4	**M1** for Joining *AO* and producing to "*P*" **M1** for marking equal angles in isosceles triangle *AOC* or *AOB* giving reason that triangles are isosceles because radii are equal **M1** for marking angle *COP* as twice angle *CAO* or marking Angle *BOP* as twice angle *BAO* giving reason that exterior angle of a triangle is equal to the interior and opposite angles o.e. **QWC: Working should be logical and sequential in structure; following on from labelling the extended line** **A1** for Identifying angle *A* as half angle *BOC* if M3 awarded **QWC: All labelling and angle notation should be consistent**
				Total for Question: 4 marks

M2.

	Working	Answer	Mark	Additional Guidance
QWC (i, ii, iii)	PS = PT and PQ = PR (equal tgts from a point) Let angle SPT = *x*	Proof	5	**B1** for PS = PT or PQ = PR **B1** for equal tangents from a point

Total for Question: 5 marks

Resource currently unavailable.