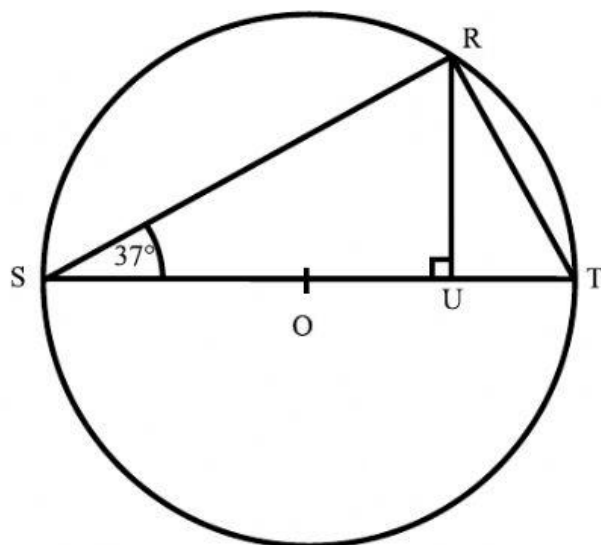


4.



R, S and T are points on the circumference of a circle, centre O .

ST is a diameter and Angle $RST = 37^\circ$.

U is the point on ST such that angle RUS is a right angle.

(a) Work out the size of angle URT.

0

(b) Work out the size of angle ROT.

0

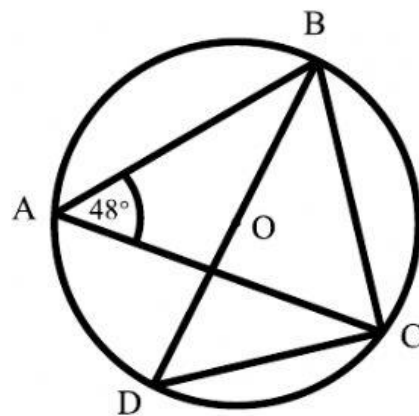
(c) Work out the size of angle ORU.

0

(d) Find the size of angle ORT.

0

5.



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

BD is a diameter of the circle. $\angle CAB = 48^\circ$.

(a) Write down the size of angle BCD .

0

(b) Find the size of angle BDC .

0

(c) Find the size of angle BOC .

0

(d) Find the size of angle CAD .

0

(e) Find the size of angle COD .

0

(f) Find the size of angle OCB .

0

6. P, Q, R and S are points on the circumference of a circle, centre, O.

TU is a tangent to the circle at the point S.

Angle ROS = 64° and angle QSU = 58° .

(i) Find the size of angle:

(a) OSQ

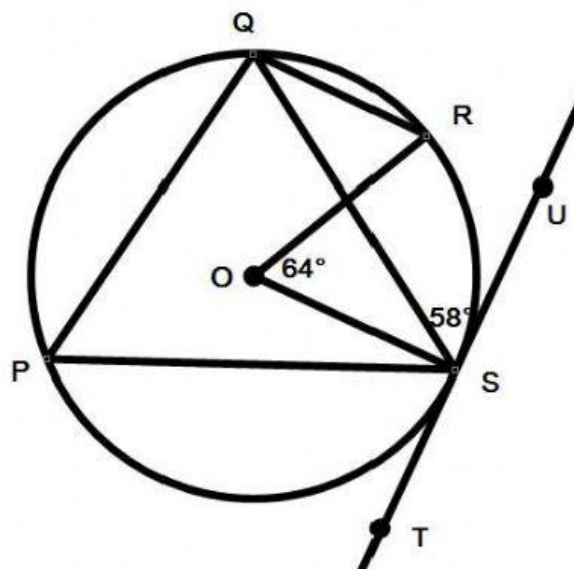
(b) SQR

(c) QPS

(d) QRS

(ii) Why are the lines QR and OS parallel?

(iii) Find the size of angle (a) QRO (b) QSR



7. P, Q, R and S are points on the circumference of a circle, centre, O.

PST is a straight line.

PQ = PS

Angle SOQ = 100° and angle RST = 78°

Work out the size of angle:

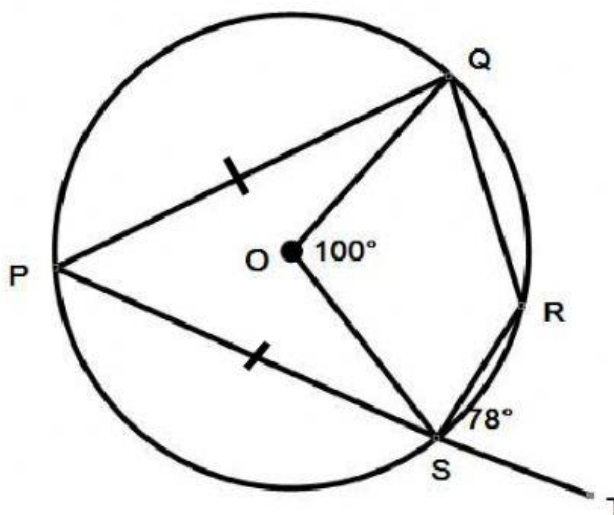
(a) QRS

(b) PQS

(c) OQS

(d) PSO

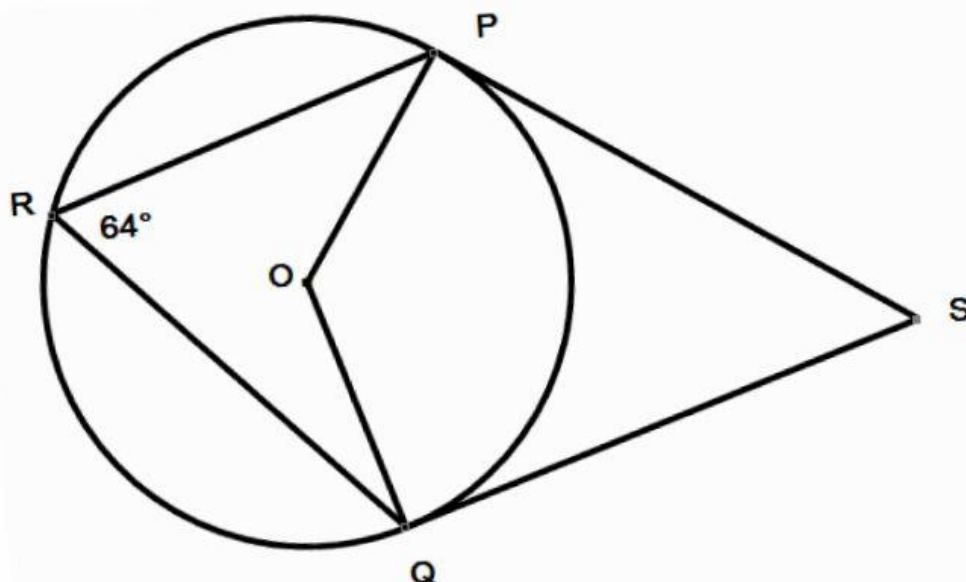
(e) SQR



8. P, Q and R are points on the circumference of a circle, centre, O.

Angle $PRQ = 64^\circ$. SP and SQ are tangents to the circle at the points P and Q respectively.

Work out the size of angle (i) PSQ (ii) PQO (iii) POS (iv) QSO



9. P, Q and R are points on the circumference of a circle, centre, O.

Angle $PSQ = 60^\circ$. SP and SQ are tangents to the circle at the points P and Q respectively.

(a) Work out the size of angle:

(i) QPS

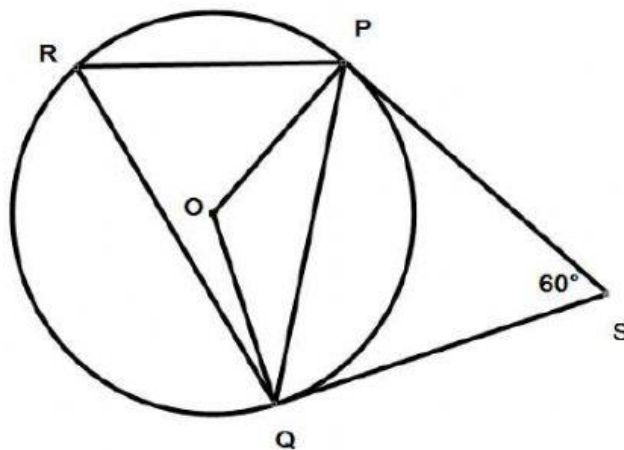
(ii) PQO

(iii) PRQ

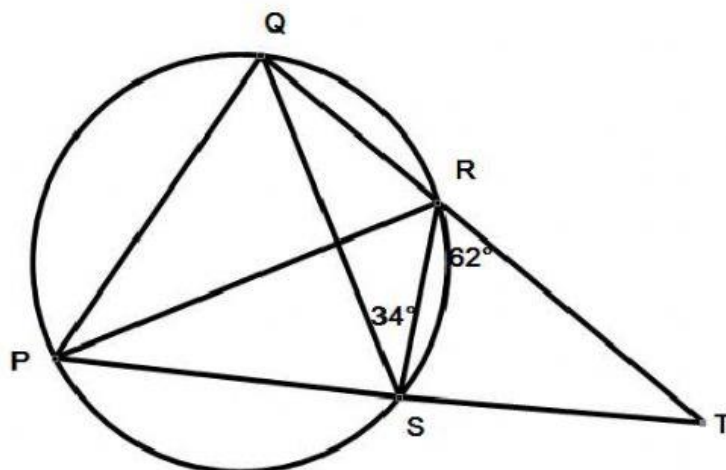
(iv) POQ

(b) What type of triangle is PQS?

(c) Given that angle $OQR = 10^\circ$,
work out the size of angle OPR.



10.



P, Q, R and S are points on the circumference of a circle.

PST and QRT are straight lines.

Angle QSR = 34° and angle SRT = 62° .

(a) Find the size of the angle:

(i) SQR (ii) RPS

(b) Given that angle PRS = 62° , show that PR is a diameter of the circle.

11. P, Q, R and S are points on the circumference of a circle.

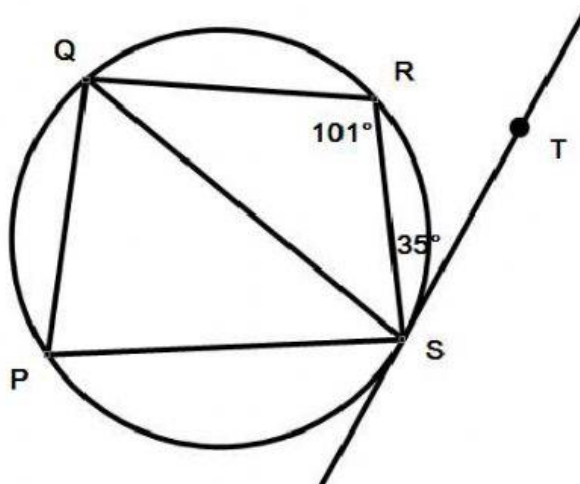
TS is the tangent to the circle at the point S.

Angle RST = 35° and angle QRS = 101° .

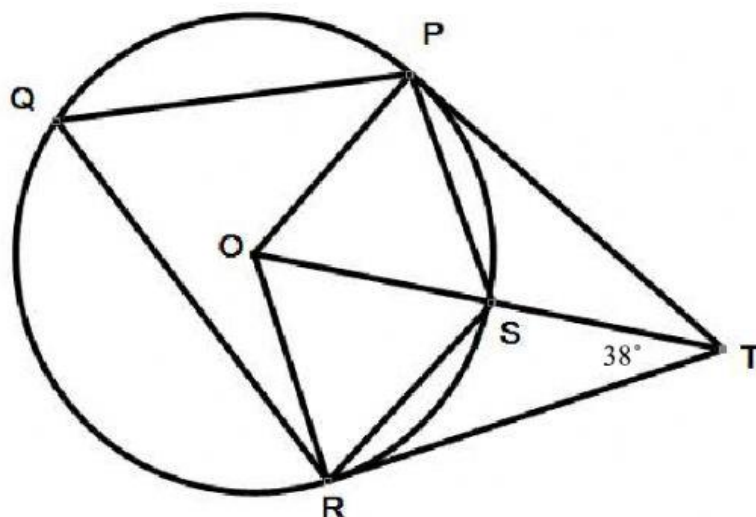
(a) Explain why QS cannot be a diameter of the circle.

(b) Find the size of angle:

(i) QPS (ii) SQR (iii) QPR



12.



P, Q, R and S are points on the circumference of a circle, centre, O.

PT and TR are tangents to the circle.

OST is a straight line.

Angle $OTR = 38^\circ$.

Find the size of the angle:

- (i) ROT (ii) PQR (iii) SRT (iv) PSO (v) PST

0 0 0 0 0