Full Name: ……. **Date: 04 December 2025**

Test

Time Allowed: 20 Minutes **Total Marks: 28**

1.

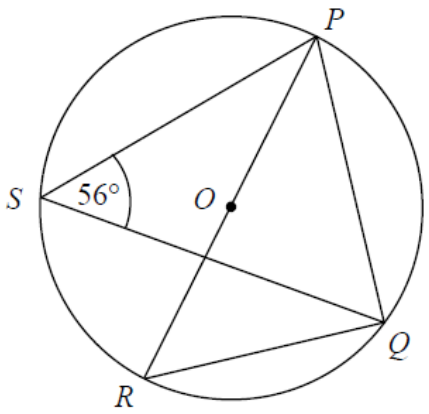


Diagram **NOT** accurately drawn

P, *Q*, *R* and *S* are points on the circumference of a circle, centre *O*.
PR is a diameter of the circle.
Angle *PSQ* = 56°.

(a) Find the size of angle *PQR*.
Give a reason for your answer.

…… °

(2)

(b) Find the size of angle *PRQ*.
Give a reason for your answer.

…… °

(2)

(c) Find the size of angle *POQ*.
Give a reason for your answer.

…… °

(2)

2.

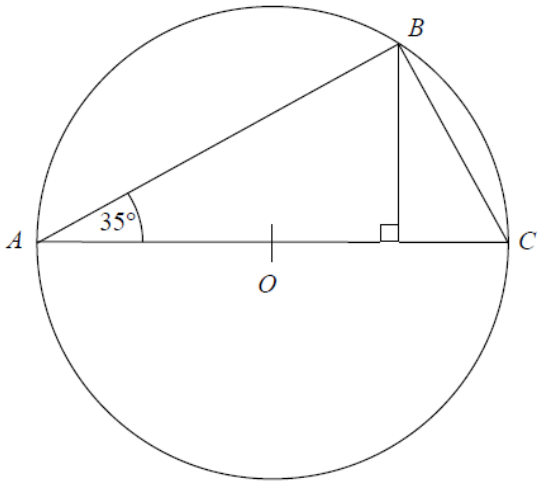


Diagram **NOT** accurately drawn

The diagram shows a circle, centre O.

AC is a diameter.
Angle $BAC = 35°$.
D is the point on AC such that angle BDA is a right angle.

(a) Work out the size of angle BCA.
Give reasons for your answer.

.....°
(2)

(b) Calculate the size of angle DBC.

.....°
(1)

(c) Calculate the size of angle BOA.

.....°
(2)

3.

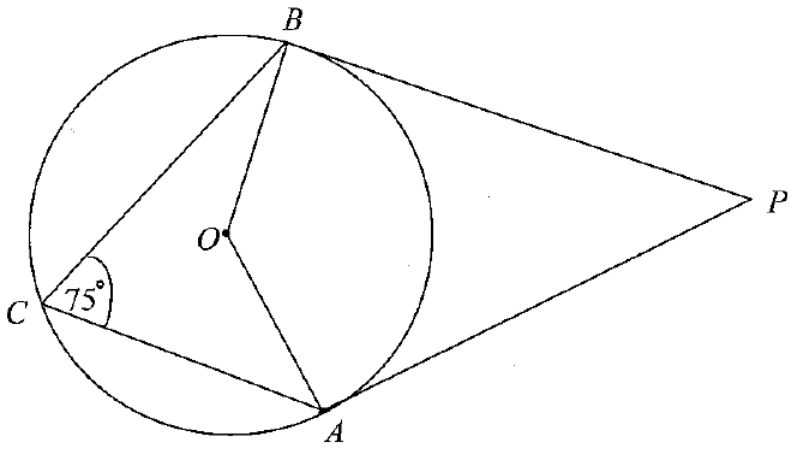


Diagram **NOT** accurately drawn

In the diagram, A, B and C are points on the circumference of a circle, centre O.
PA and PB are tangents to the circle.
Angle ACB = 75°.

(a) (i) Work out the size of angle AOB.

.....°

(ii) Give a reason for your answer.

.....

.....

(2)

(b) Work out the size of angle APB.

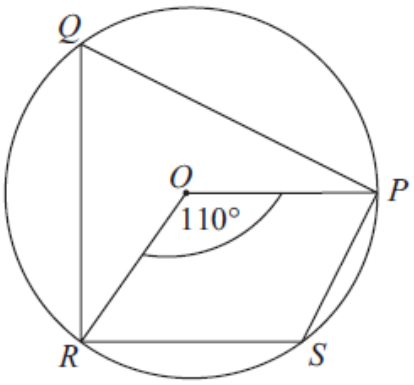
.....°

(3)

Question 4 is on the next page

4.

Diagram **NOT** accurately drawn



In the diagram, O is the centre of the circle.
P, Q, R and S are points on the circle.

Angle $ROP = 110°$

Calculate the size of angle RSP.

.....°

(2)

Question 5 is on the next page

5.

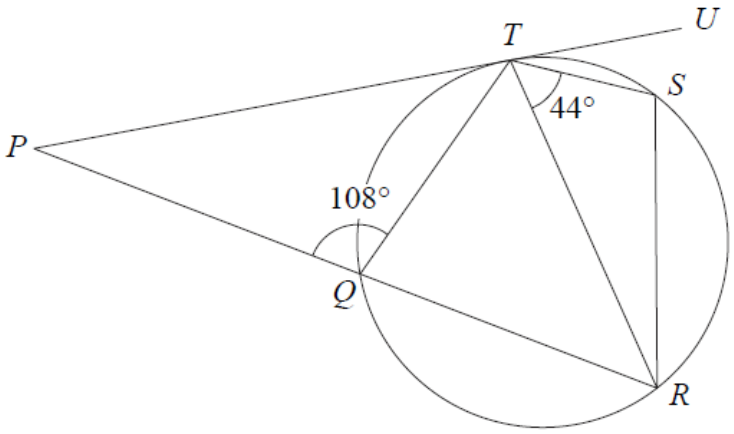


Diagram **NOT** accurately drawn

Q, R, S and T are points on the circumference of a circle.
PU is a tangent to the circle at T.
PQR is a straight line.
Angle $PQT = 108°$.
Angle $STR = 44°$.

Work out the size of angle STU.
You must give a reason for each step in your working.

°

.....

(5)

6.

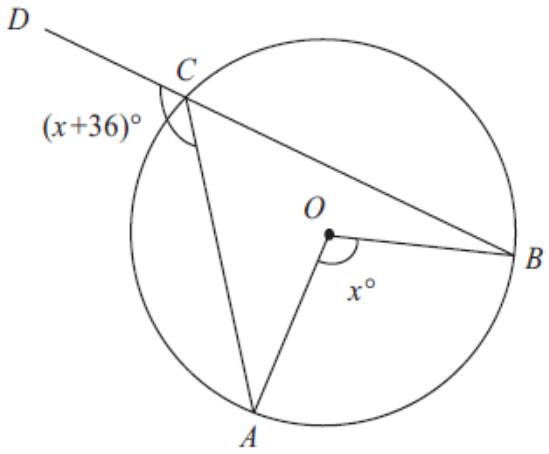


Diagram **NOT** accurately drawn

A, *B* and *C* are points on a circle, centre *O*.
BCD is a straight line.

Find the value of *x*.

x = ...

(5)

- End of Test -