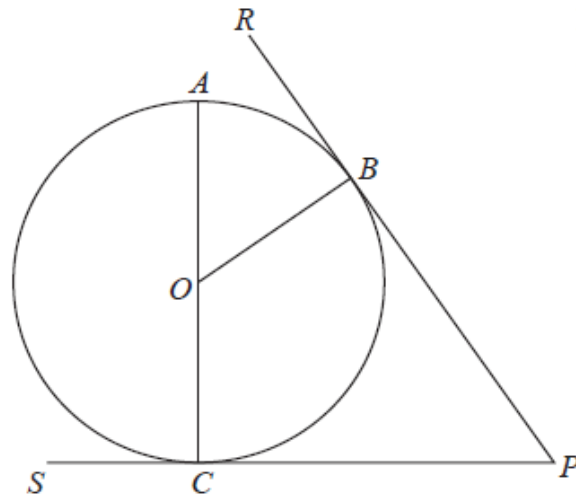# Questions

Q1.

*

Diagram **NOT** accurately drawn

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

RBP is the tangent to the circle at *B*.
SCP is the tangent to the circle at *C*.
AOC is a diameter of the circle.

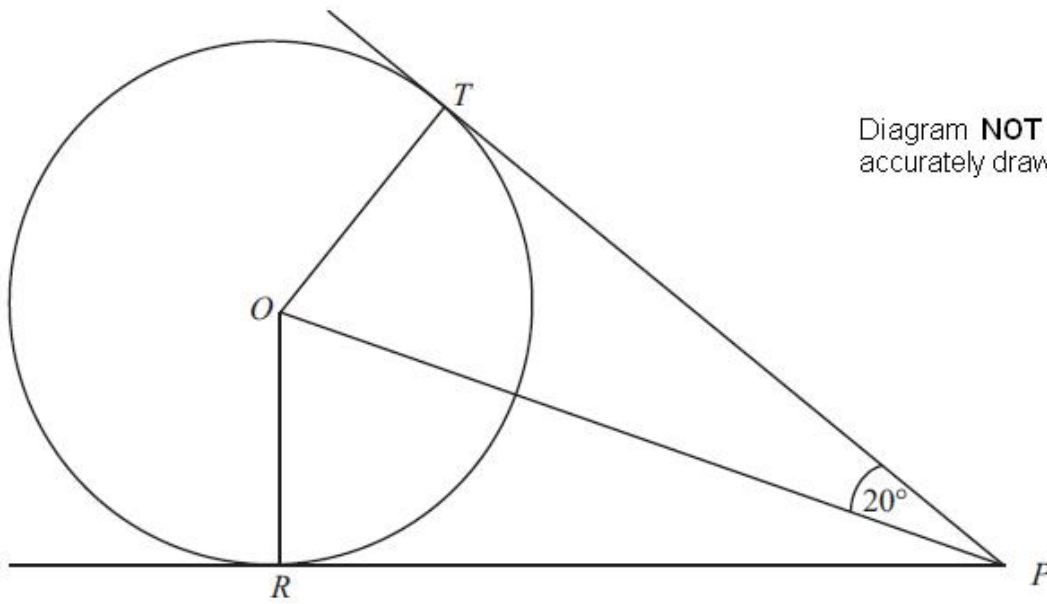Prove that angle *AOB* is equal to angle *CPB*.
You must give reasons at each stage.

(Total for question = 5 marks)

Q2.

*

Diagram **NOT** accurately drawn

T and *R* are two points on a circle centre *O*.

PT and *PR* are the tangents to the circle from *P*.

Angle *TPO* = 20°.

Work out the size of angle *TOR*.
You must give reasons for each stage of your working.
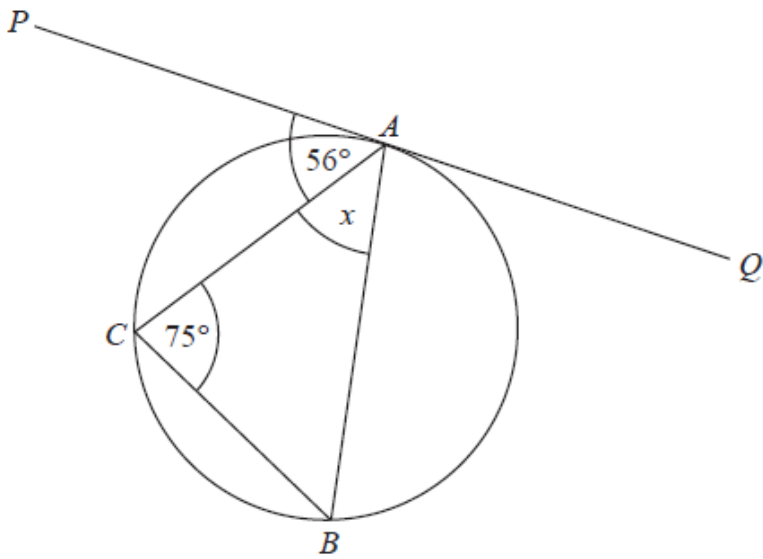
(Total for Question is 4 marks)

Q3.

*

Diagram **NOT** accurately drawn

A, *B* and *C* are points on the circumference of a circle.
The straight line *PAQ* is a tangent to the circle.
Angle *PAC* = 56°
Angle *ACB* = 75°

Work out the size of the angle marked *x*.
Give reasons for each stage of your working.
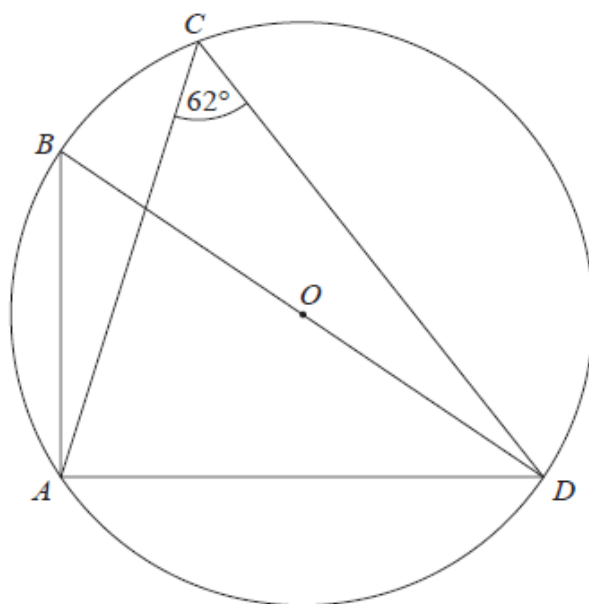
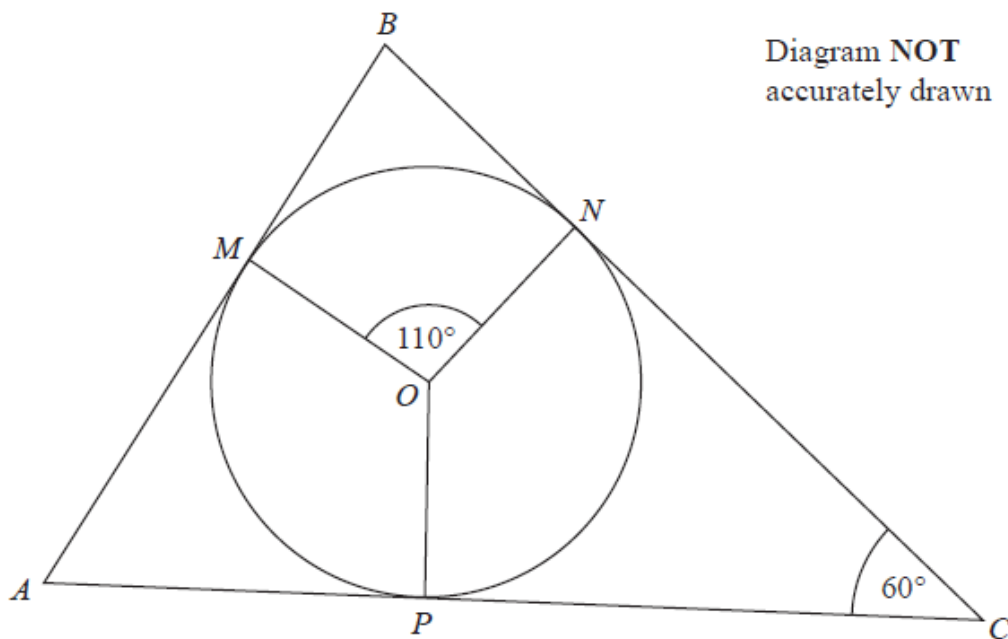**(Total for question = 3 marks)**

Q4.

*

Diagram **NOT** accurately drawn

A, *B*, *C* and *D* are points on the circumference of a circle, centre *O*.
BOD is a straight line.
Angle *ACD* = 62°

Find the size of angle *ADB*.
Give a reason for each stage in your working.

(Total for question = 4 marks)

Q5.

*

Diagram **NOT**
accurately drawn

M, *N* and *P* are points on the circumference of a circle, centre *O*.
AMB, *BNC*, and *CPA* are tangents to the circle.

Angle *MON* = 110°
Angle *BCA* = 60°

Work out the size of angle *BAC*.
Give reasons for each stage of your working.

(Total for question = 4 marks)