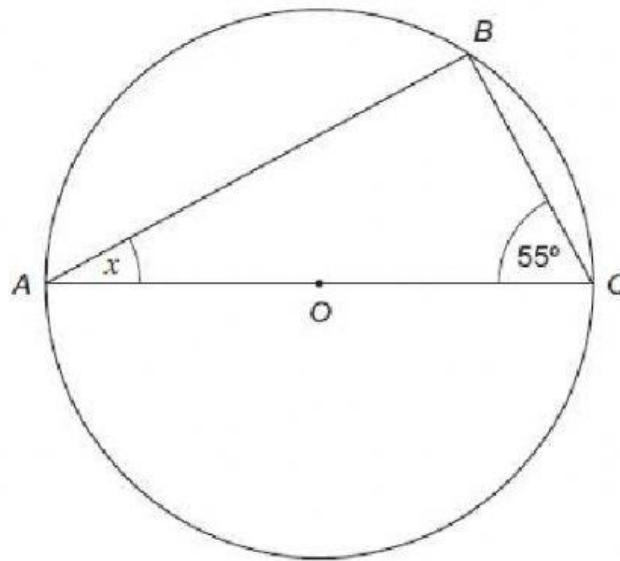


Q1.(a) A , B and C are points on the circumference of a circle with centre O .

Not drawn accurately



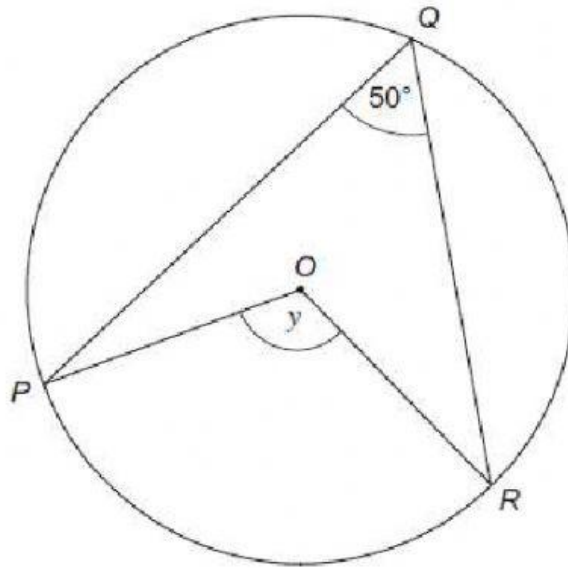
Work out the size of angle x .

Answer degrees

(1)

- (b) P , Q and R are points on the circumference of a circle with centre O .

Not drawn accurately



Work out the size of angle y .
Give a reason for your answer.

Answer degrees

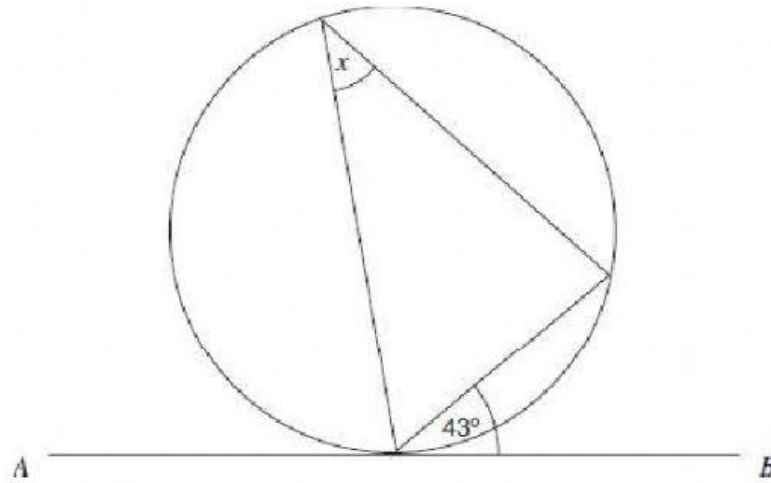
Reason

.....

(2)
(Total 3 marks)

Q2. AB is a tangent to the circle.

Not drawn accurately



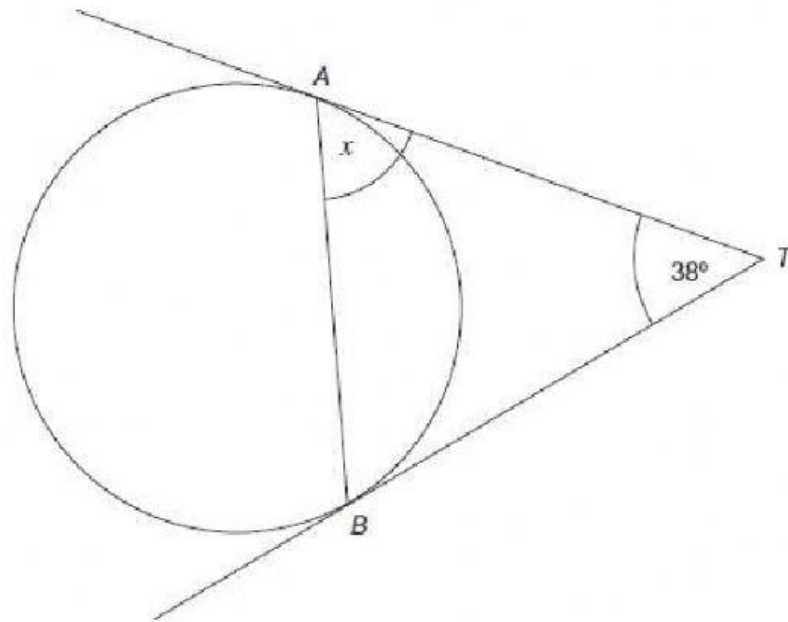
Write down the value of x .
Give a reason for your answer.

Answer degrees

Reason
(Total 2 marks)

- Q3.** (a) AB is a chord of the circle.
 TA and TB are tangents to the circle.

Not drawn accurately



Work out the size of angle x .

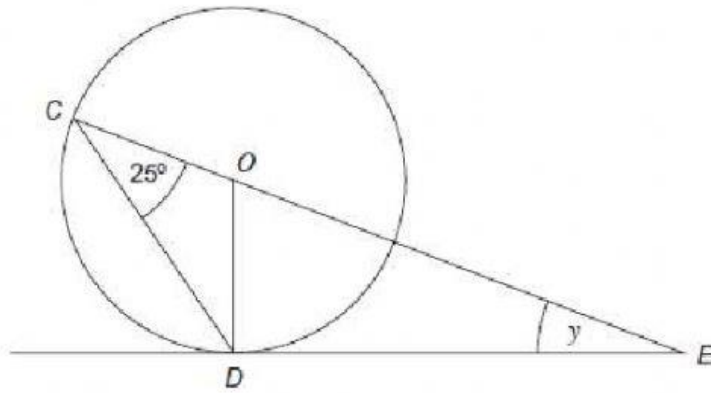
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Answer degrees

(2)

- (b) The diagram shows a circle, centre O .
 C and D are points on the circumference.
 COE is a straight line.
 DE is a tangent.

Not drawn accurately



Work out the size of angle y .
You **must** show your working, which may be on the diagram.

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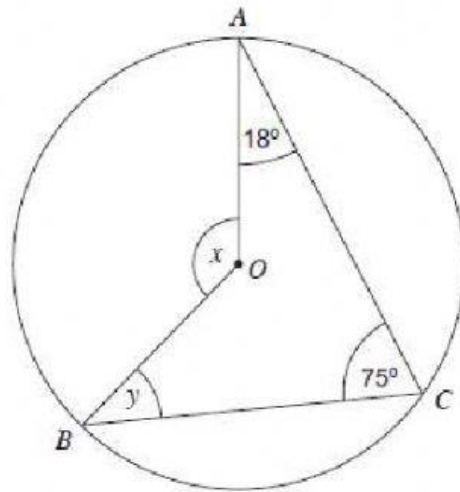
.....

Answer degrees

(3)
(Total 5 marks)

Q4. The diagram shows a circle, centre O .

Not drawn accurately



(a) Work out the size of angle x .

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Answer degrees

(1)

(b) Work out the size of angle y .

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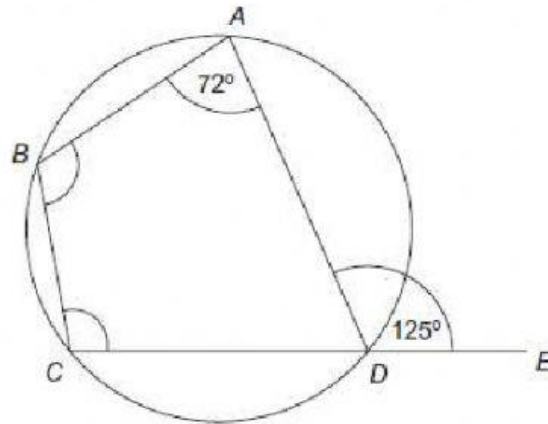
Answer degrees

(3)
(Total 4 marks)

Q5.

Points A , B , C and D are on the circumference of the circle.
 CDE is a straight line.

Not drawn accurately



- (a) Work out the size of angle BCD .
 Give a reason for your answer.

Answer degrees

Reason

(2)

- (b) Work out the size of angle ABC .

.....

Answer degrees

(1)

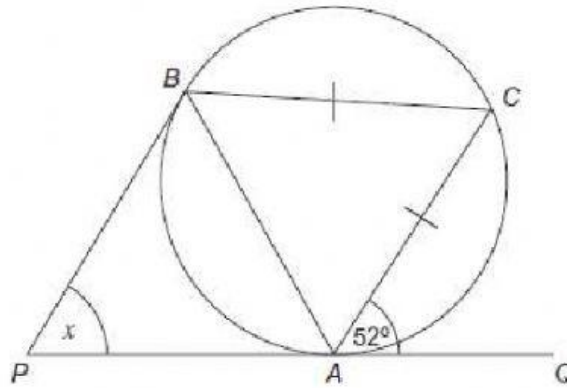
(Total 3 marks)

Q6.

PAQ and *PB* are tangents to the circle.

$AC = BC$

Not drawn accurately



Work out the size of angle x .
You **must** show your working which may be on the diagram.

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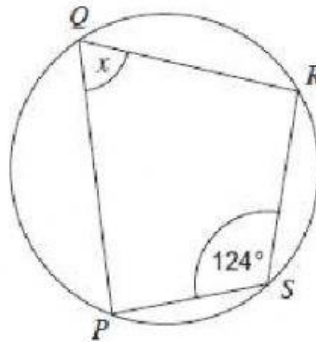
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Answer degrees

(Total 4 marks)

Q7.(a) P, Q, R and S are points on the circumference of the circle.

Not drawn accurately



Work out the size of angle x .

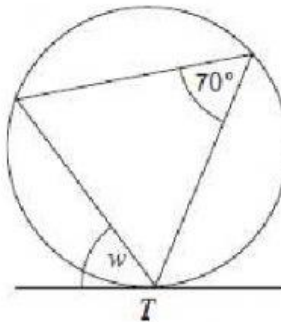
.....

Answer degrees

(1)

(b) The diagram shows a circle and a tangent at T .

Not drawn accurately



Write down the size of angle w .
Give a reason for your answer.

Answer degrees

Reason

(2)