Properties of circle
Question Bank
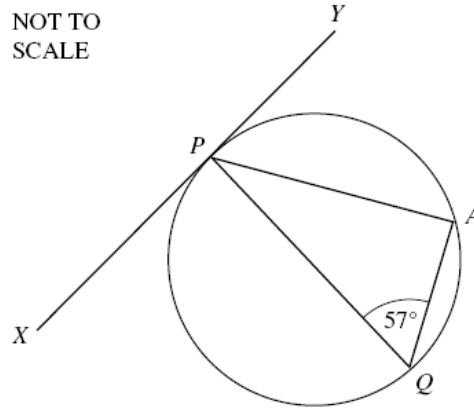
(1) In the diagram *XPY* is a tangent to the circle and *PQ* is a diameter.

Angle *AQP* = 57°.

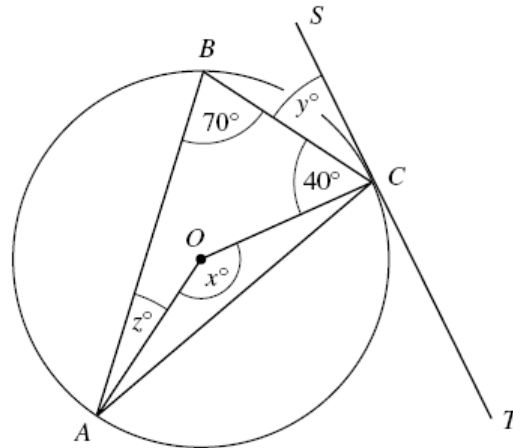Calculate

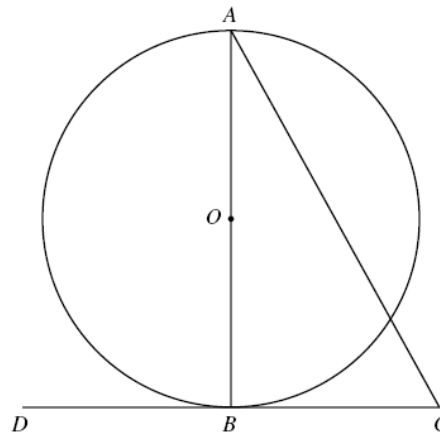**(a)** angle *APQ*,

 (b) angle *APY*.

NOT TO SCALE

(2) Circle *ABC* has centre *O*. The line *SCT* is a tangent.
Angle *ABC* =70° and angle *OCB* = 40°.
Find *x*, *y* and *z*.

NOT TO SCALE

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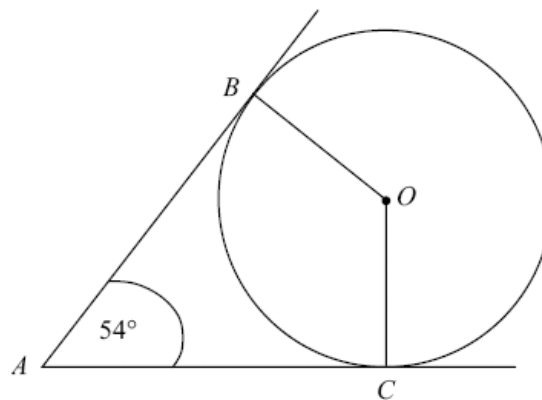(3) In the diagram, *AB* is a diameter of the circle, centre *O*.
DBC is a tangent at *B*.

NOT TO SCALE

 (a) Write down the size of angle *ABC*.
 (b) The angles *BAC* and *ACB* are in the ratio 5:7.
     Work out the size of angle *BAC*.

(4) AB and AC are tangents to the circle,
centre O.
Angle BAC = 54°
(a) Write down the size of angle ABO.
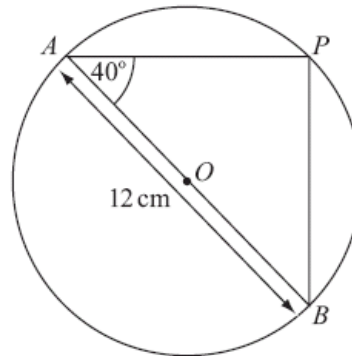(b) Work out angle BOC.

NOT TO SCALE

54°

(5) In the diagram AB is the diameter of a circle, centre O. The length of AB is 12 cm.
(a) Write down the size of angle APB.
(b) Angle PAB = 40°.
Calculate the length of PB.
(c) Calculate the area of the circle.

NOT TO
SCALE