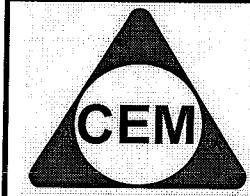


NAME : \_\_\_\_\_



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## YEAR 12 – EXT.1 MATHS

### REVIEW TOPIC : CIRCLE GEOMETRY – SP1

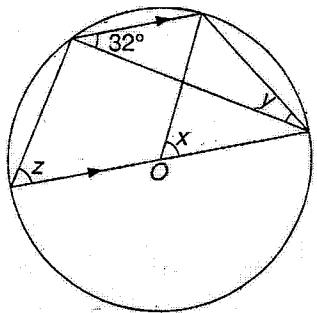
Received on			Check corrections on pages:
Completed on			
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Tutor's Initials

Dated on

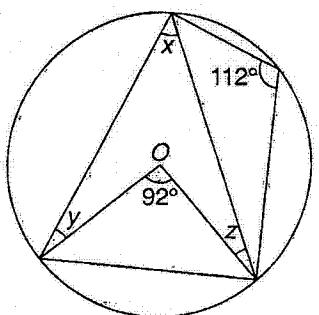
**EXERCISES:**

- (1) Find the value of the pronumeral in each case. Give reasons for your answer.
- (a)



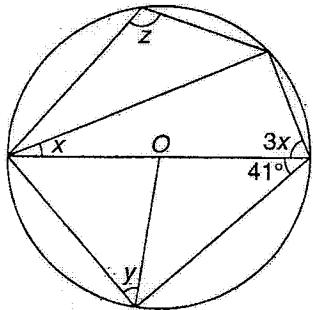
$$x = 64^\circ, y = 26^\circ, z = 58^\circ$$

(b)



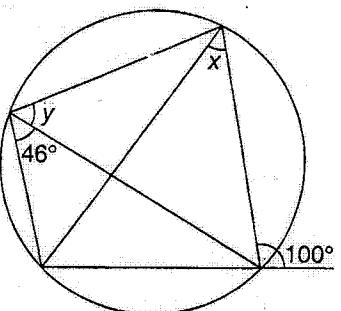
$$x = 46^\circ, y = 24^\circ, z = 22^\circ$$

(c)



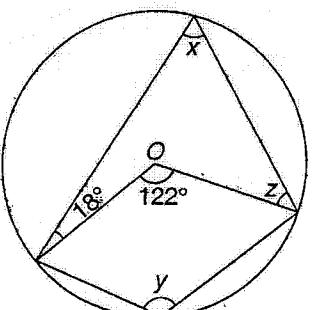
$$x = 22.5^\circ, y = 49^\circ, z = 112.5^\circ$$

(d)



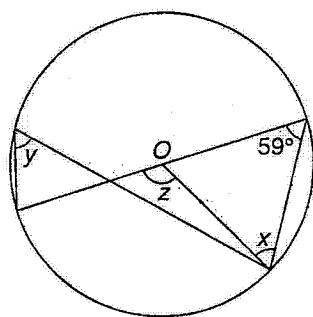
$$x = 46^\circ, y = 54^\circ$$

(e)



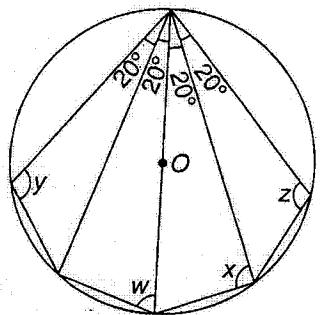
$$x = 61^\circ, y = 119^\circ, z = 43^\circ$$

(f)



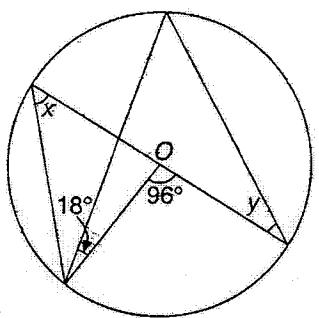
$$x = 59^\circ, y = 59^\circ, z = 118^\circ$$

(g)



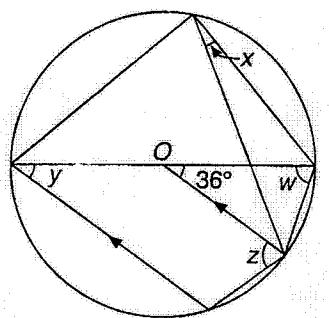
$$w = 70^\circ, x = 90^\circ, y = 110^\circ, z = 110^\circ$$

(h)



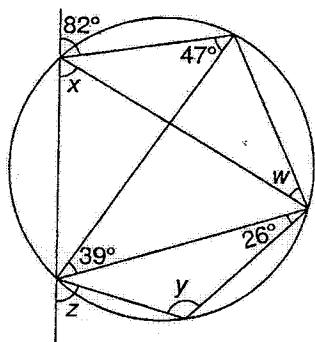
$$x = 48^\circ, y = 30^\circ$$

(i)



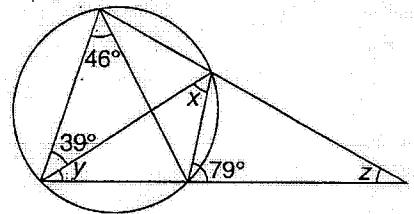
$$w = 72^\circ, x = 18^\circ, y = 36^\circ, z = 72^\circ$$

(j)



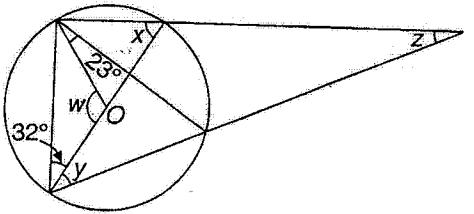
$$w = 35^\circ, x = 59^\circ, y = 121^\circ, z = 73^\circ$$

(k)



$$x = 46^\circ, y = 33^\circ, z = 29^\circ$$

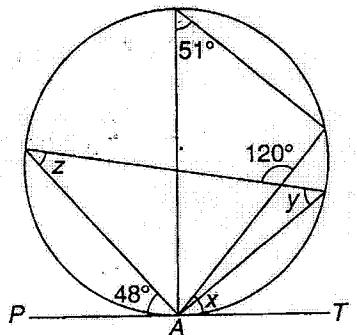
(l)



$$w = 116^\circ, x = 58^\circ, y = 35^\circ, z = 23^\circ$$

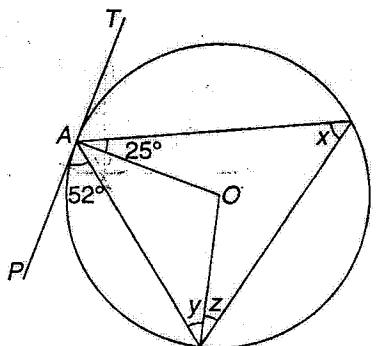
- (2) Find the value of the pronumerals in each of the following diagrams.  $TAP$  is the tangent to the circle at  $A$  and  $TBQ$  is the tangent to the circle at  $B$ .  $O$  is the centre of the circle.

(a)



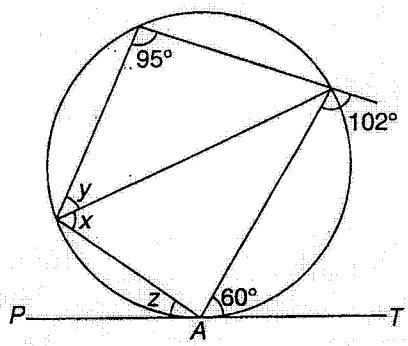
$$x = 51^\circ, y = 48^\circ, z = 39^\circ$$

(b)



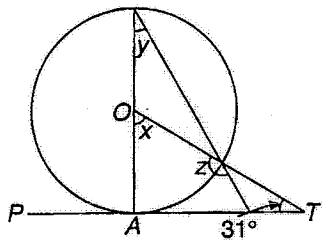
$$x = 52^\circ, y = 38^\circ, z = 27^\circ$$

(c)



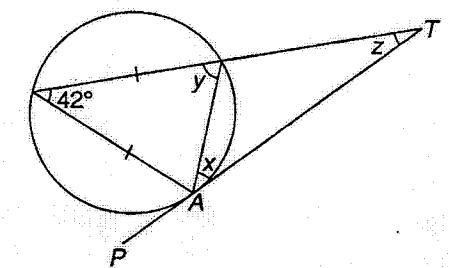
$$x = 60^\circ, y = 42^\circ, z = 35^\circ$$

(d)



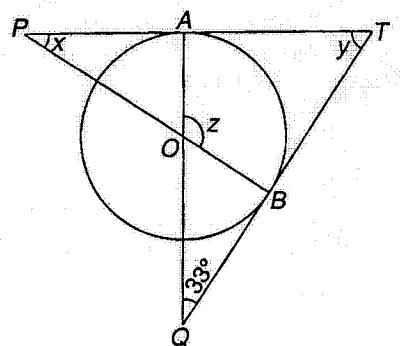
$$x = 59^\circ, y = 29.5^\circ, z = 150.5^\circ$$

(e)



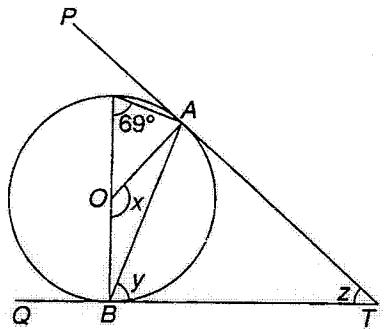
$$x = 42^\circ, y = 69^\circ, z = 27^\circ$$

(f)



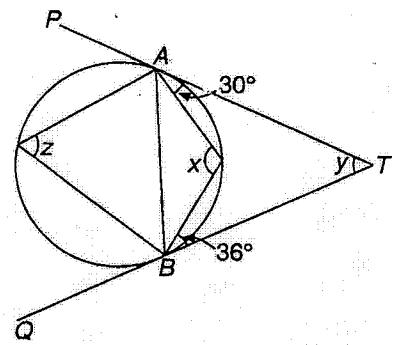
$$x = 33^\circ, y = 57^\circ, z = 123^\circ$$

(g)



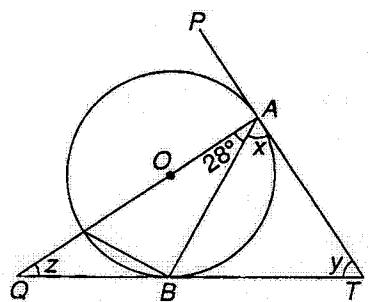
$$x = 138^\circ, y = 69^\circ, z = 42^\circ$$

(h)



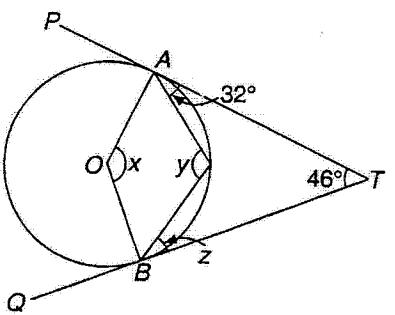
$$x = 114^\circ, y = 48^\circ, z = 66^\circ$$

(i)



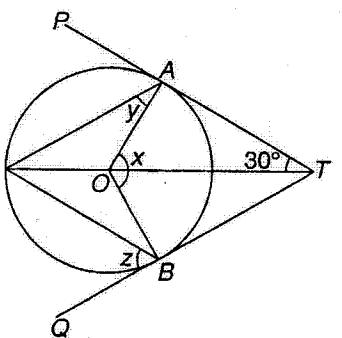
$$x = 62^\circ, y = 56^\circ, z = 34^\circ$$

(j)



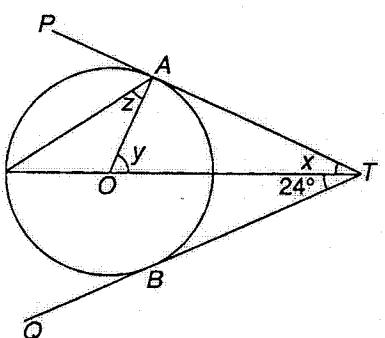
$$x = 134^\circ, y = 113^\circ, z = 35^\circ$$

(k)



$$x = 120^\circ, y = 30^\circ, z = 60^\circ$$

(l)



$$x = 24^\circ, y = 66^\circ, z = 33^\circ$$