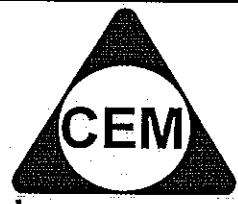


NAME : \_\_\_\_\_



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## YEAR 10 – ADVANCED MATHS REVIEW BOOKLET 1

### TOPIC: CIRCLE GEOMETRY

Received on		Check corrections on pages:
Completed on		
Checked by		

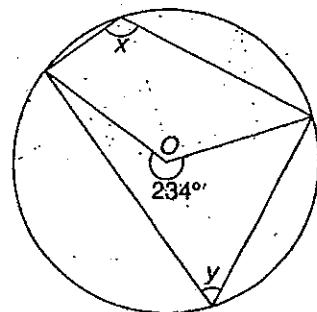
Tutor's Initials

Dated on

**EXERCISES:**

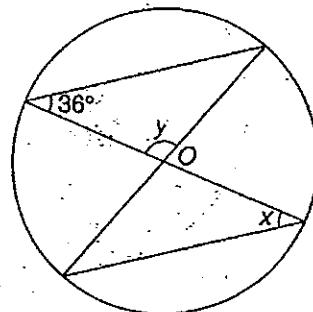
- (1) Find the value of the unknown in each of the following circles, centre  $C$ , giving reasons.

(a)



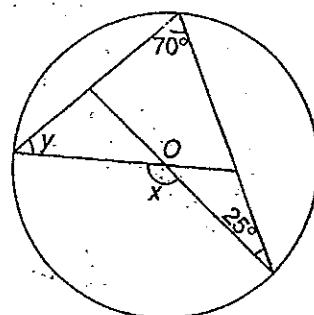
$$x = 117^\circ, y = 63^\circ$$

(b)



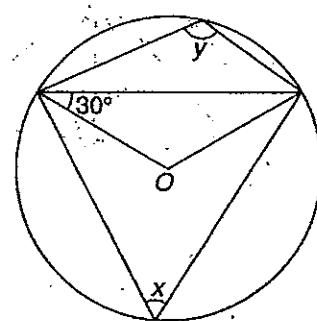
$$x = 36^\circ, y = 108^\circ$$

(c)



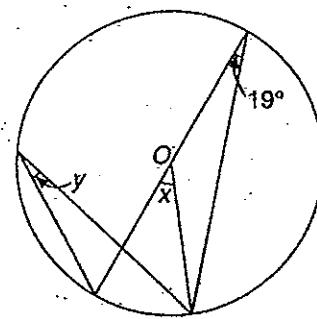
$$x = 140^\circ, y = 45^\circ$$

(d)



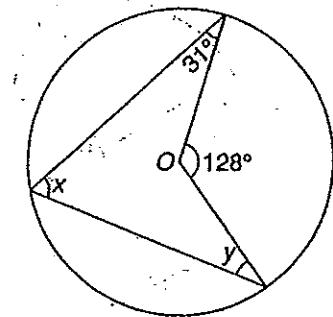
$$x = 60^\circ, y = 120^\circ$$

(e)



$$x = 38^\circ, y = 19^\circ$$

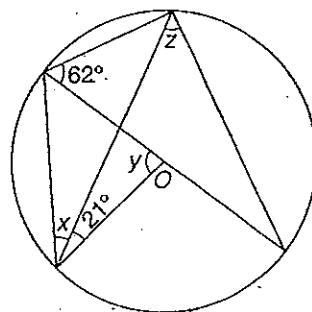
(f)



$$x = 64^\circ, y = 33^\circ$$

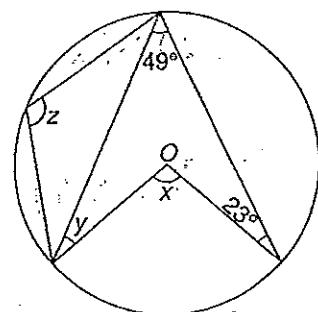
(2) Find the value of each pronumeral , giving reasons for your answer.

(a)



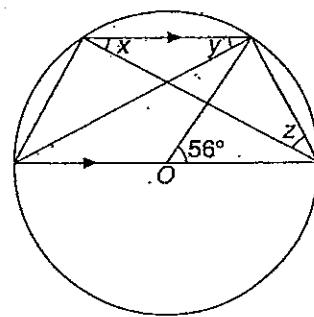
$$x = 28^\circ, y = 82^\circ, z = 49^\circ$$

(b)



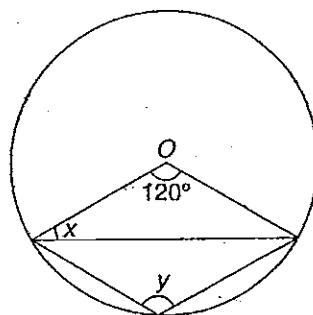
$$x = 98^\circ, y = 26^\circ, z = 116^\circ$$

(c)



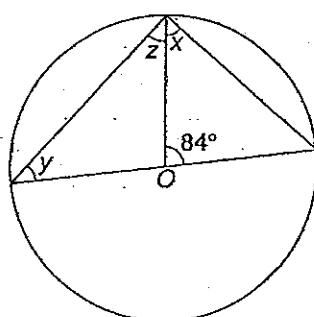
$$x = 28^\circ, y = 28^\circ, z = 34^\circ$$

(d)



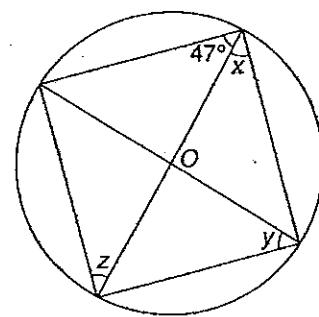
$$x = 30^\circ, y = 120^\circ$$

(e)



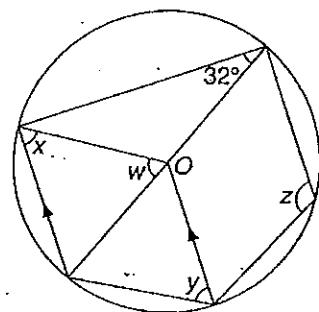
$$x = 47^\circ, y = 43^\circ, z = 43^\circ$$

(f)



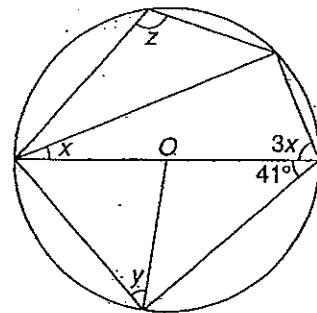
$$x = 43^\circ, y = 47^\circ, z = 43^\circ$$

(g)



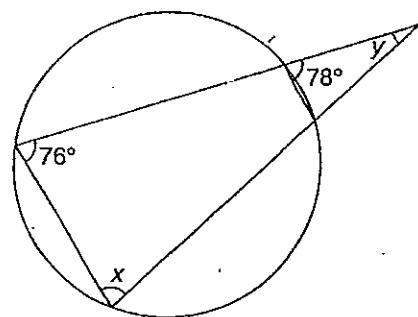
$$w = 64^\circ, x = 58^\circ, y = 61^\circ, z = 119^\circ$$

(h)



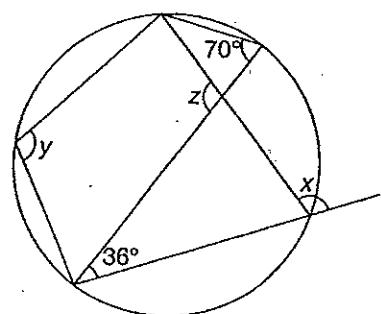
$$x = 22.5^\circ, y = 49^\circ, z = 112.5^\circ$$

(i)



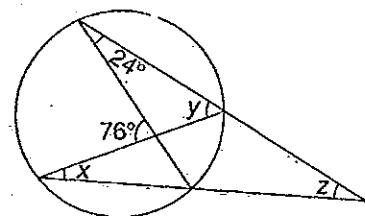
$$x = 78^\circ, y = 26^\circ$$

(j)



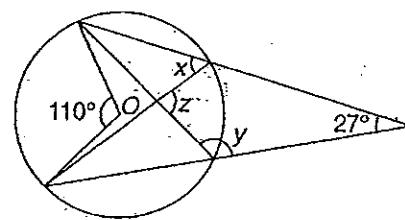
$$x = 110^\circ, y = 110^\circ, z = 106^\circ$$

(k)



$$x = 24^\circ, y = 52^\circ, z = 28^\circ$$

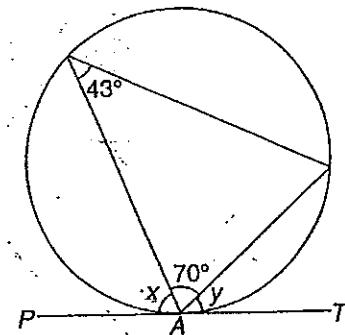
(I)



$$x = 55^\circ, y = 125^\circ, z = 83^\circ$$

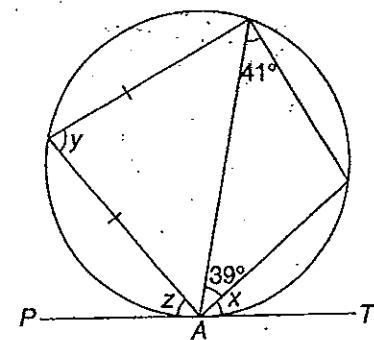
- (3) Find the value of the pronumerals in each of the following diagrams.  $TAP$  is the tangent to the circle at  $A$  and  $TBQ$  is the tangent to the circle at  $B$ .  $O$  is the centre of the circle.

(a)



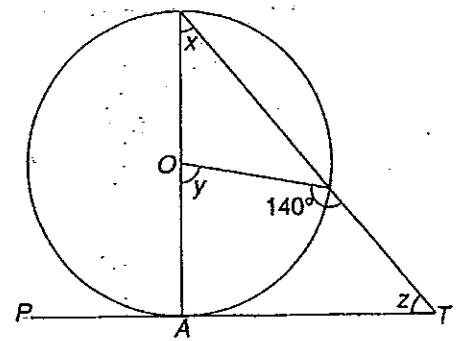
$$x = 67^\circ, y = 43^\circ$$

(b)



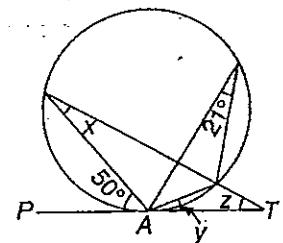
$$x = 41^\circ, y = 80^\circ, z = 50^\circ$$

(c)



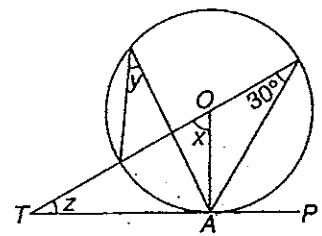
$$x = 40^\circ, y = 80^\circ, z = 50^\circ$$

(d)



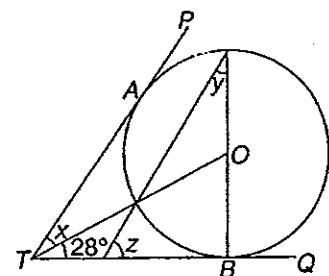
$$x = 21^\circ, y = 21^\circ, z = 29^\circ$$

(e)



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

(f)



$$x = 28^\circ, y = 31^\circ, z = 59^\circ$$