Subject:	MATHEMATICS	***Chapter:***	**Cirlces**				
Class:	X	***Batch:***	LOT	**LOT 2020 (M-2)**		***Date:***	05/05/2020
No. of Questions:		***Type:***	Descriptive	***Mark:***	**20**	***Time:***	45 mts

ANSWER KEY

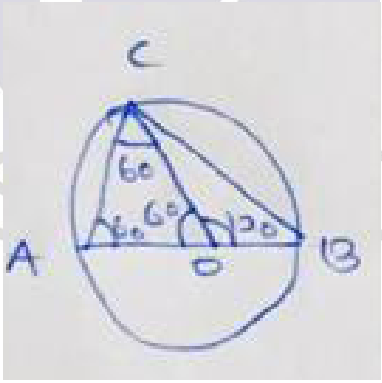
1. $\angle AOB = 80°$

   $\angle AOB = \frac{180 - 80}{2} = 50°$

   $\angle B = 50 + 15 = 65°$

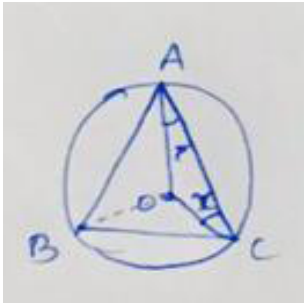
   $\angle C = 40°$

   $\angle A = 180 - (65 + 40 = 75°$

2. 

   a) $\angle OCA = 60°$

   b) $\angle OAC = 60°$

3. 

$\angle OAC = x°$

b) $\angle OCA = x°$

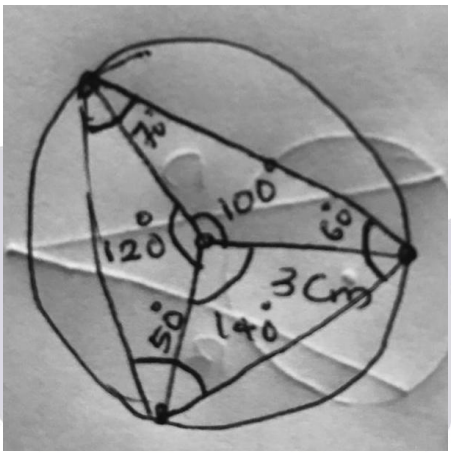
$\angle ABC = \frac{\angle AOC}{2}$

$= \frac{180 - 2x}{2} = 90 - x$

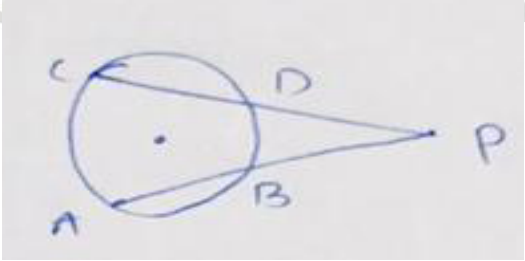
$\therefore \angle OAC + \angle ABC = x° + 90 - x°$

$\mathbf{90°}$

4.



5.



a) $PD = x$

$PC = x + 9$

b) $PA \times PB = PC \times PD$

$9 \times 4 = (x + 9) \times x$

$36 = x^2 + 9x$

$x^2 + 9x = 36$

$x^2 + 9x - 36 = 0$

$x = -b \pm \sqrt{\frac{b^2 - 4ac}{2a}}$

a = 1

b = 9

c = -36

x = 3

PD = 3cm, PC = 9+3 = 12 cm

6.