

1. In the figure $\angle c=40^{\circ}, \angle O B C=15^{\circ}$

a) Find $\angle A O B$ ?
b) Find all angles at $\triangle A B C$ ?
2. In the figure $O$ is the centre of the circle and $A B$ is the diameter. If $\angle B O C=120^{\circ}$. Find

b) $\angle O A C$ ?
3. $\mathrm{A}, \mathrm{B}, \mathrm{C}$ are points in the circle with centre O . If $\angle O C A=x$ then

a) Find $\angle O A C$ ?
b) Prove that $\angle O C A+\angle A B C=90^{\circ}$
4. Draw a circle with radius 3 cm construct a triangle with vertices on the circle and having angles $50^{\circ}, 60^{\circ}, 70^{\circ}$
5. In the figure $\mathrm{PA}=9 \mathrm{~cm}, \mathrm{~PB}=4 \mathrm{~cm} \& \mathrm{PC}$ is 9 cm more than PD .

a) If $\mathrm{PD}=x$, find the length of PC ?
b) Find the length of PD?
6. Draw a rectangle of length 6 cm and breadth 4 cm construct a rectangle having same area and one side 7 cm ?
