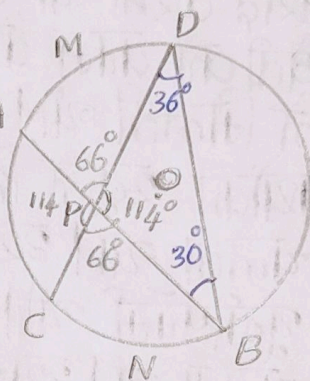# Assignment

1) In the figure the length of the arc CNB is $\frac{1}{5}$ of the perimeter of the circle and the length of the arc AMD is $\frac{1}{6}$ of the perimeter of the circle.

a) What is the measure of central angle of the arc CNB?

b) Find the measure of $\angle CDB$, $\angle ABD$ and $\angle APD$.

Ans) a) central angle of arc

$$CNB = \frac{1}{5} \times 360°$$

$$= 72°$$

b)   central angle of arc CNB = $72°$

$$\therefore \angle CDB = \frac{72°}{2} = 36°$$

central angle of arc AMD = $60°$ $\left[\frac{1}{6} \times 360° \right]$

$$\therefore \angle ABD = \frac{60°}{2} = 30°$$

$$\therefore \angle APD = 36° + 30° = 66°$$