## Relation between an Arc and an Angle.

If $s$ is the length of an arc of a circle of radius $r$, then the angle $\theta$ (in radians) subtended by this arc at the centre of the circle is given by $\theta=\frac{s}{r}$ or $s=r \theta$ i.e., arc $=$ radius $\times$ angle in radians

Sectorial area: Let $O A B$ be a sector having central angle $\theta^{C}$ and radius $r$. Then area of
 the sector $O A B$ is given by $\frac{1}{2} r^{2} \theta$.

## Important Tips

(- The angle between two consecutive digits in a clock is $30^{\circ}$ ( $=\pi / 6$ radians). The hour hand rotates through an angle of $30^{\circ}$ in one hour.
(-) The minute hand rotate through an angle of $6^{\circ}$ in one minute.

