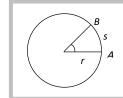
## Relation between an Arc and an Angle.

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 × angle in

radians

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



## **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.
- $\ensuremath{\mathscr{F}}$  The minute hand rotate through an angle of  $6^\circ$  in one minute.