Time and Distance

1. *Speed, Time and Distance:*

   Speed = $\left(\frac{\text{Distance}}{\text{Time}}\right)$, Time = $\left(\frac{\text{Distance}}{\text{Speed}}\right)$, Distance = (Speed x Time).

2. *km/hr to m/sec conversion:*

   x km/hr = $\left(x \times \frac{5}{18}\right)$ m/sec.

3. *m/sec to km/hr conversion:*

   x m/sec = $\left(x \times \frac{18}{5}\right)$ km/hr.

4. If the ratio of the speeds of A and B is $a : b$, then the ratio of the

   the times taken by then to cover the same distance is $\frac{1}{a} : \frac{1}{b}$ or $b : a$.

5. Suppose a man covers a certain distance at x km/hr and an equal distance at y km/hr. Then,

   the average speed during the whole journey is $\left(\frac{2xy}{x+y}\right)$ km/hr.