Time, Speed and Distance

Conversion-

- Km/hr to m/sec- multiply by 5/18
- m/sec to km/hr-multiply by 18/5

Basic Formula – Time=Distance/Speed, T=D/S

Type 1- Single object moving in any Direction

Time= (length of object +distance)/speed.

Type 2- Two object moving in same direction

Time=(length of 1^{st} object + length of 2^{nd} object +distance)/(speed1-speed2)

Note- subtract smaller speed from greater speed.

Type 3- Two object moving in opposite Direction

Time=(length of 1^{st} object + length of 2^{nd} object +distance)/(speed1+speed2)

Type 4- Train crossing platform

Time=(length of train + length of platform +distance)/speed of train

Note- Before solving the question check the unit of time, speed, distance is same or not. Make the unit same before solving if it is not same