

Class-11-Physics-Worksheet-2
Chapter-2-Motion in a Straight Line

Things to remember

* Always write formula first

* Convert km/h \rightarrow m/s (multiply by 5/18)

1. A car starts from rest and accelerates at 2 m/s^2 for 5 s. Find final velocity.
2. A body moving with velocity 20 m/s comes to rest in 4 s. Find acceleration.
3. A stone is dropped from a height of 45 m. Find time to reach ground ($g = 9.8 \text{ m/s}^2$).
4. A car accelerates from 10 m/s to 30 m/s over a distance of 100 m. Find acceleration.
5. A body travels 20 m in 2 s and 40 m in next 2 s. Find acceleration.
6. A ball is thrown vertically upward with 20 m/s. Find maximum height.
7. A train moving at 72 km/h is brought to rest in 10 s. Find retardation.
8. A body starts from rest and moves with 3 m/s^2 for 4 s. Find distance.
9. A stone is thrown upward with 19.6 m/s. Find time to reach maximum height.
10. A car moves with constant velocity of 15 m/s for 10 s. Find displacement.