



PHYSICS Year 10

Practice Questions

Kinematics: Velocity, Acceleration and Graphs

Q1.

A car moves 5 Km east, then 5 Km south, 5 Km east and 5 Km south. Find the distance and displacement of the car from its initial position.

Q2.

A horse runs on a circular track of radius 6 m and after 5 minutes reached to the starting point. Find the displacement and distance run by the horse.

Q3.

Kushal rides a bicycle 5 km east and then 5 km north. The trip takes 1.5 hours. Find

- (a) Total distance travelled;
- (b) Average speed;
- (c) Displacement;
- (d) Average velocity.

Q4.

Vishal accelerates a BMW car from 0 to 96.5 km/h in 3.98 s. Calculate the acceleration, in m/s^2 , of his car.

Q5.

The graph below shows the travel of a car from Canberra-Sydney-Canberra. Find the –

- (a) Acceleration of the car at 5 sec.
- (b) Displacement after 40 sec.
- (c) Average velocity.


