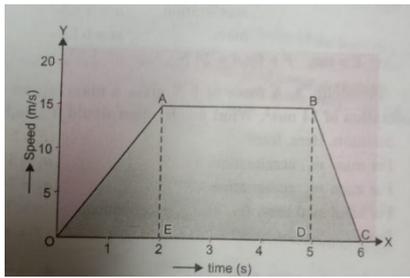




Force Numerical Test Paper Ninth Std

1. A ball of 20 gm is moving along a straight line on a table. How much force dose the table exert on the ball to bring it rest in 10 seconds? Initial velocity is 20 m/s.
2. A constant force acts on an object of mass 5 kg for a duration of 2 seconds. It increases speed from 3m/s to 7m/s. find the value of force. If this force id applied for 5 seconds what would be the final velocity of the object?
3. A feather of mass 10 gm is dropped from a height. it is found to fall down with a constant velocity. what is the force acting on it?
4. A car A of mass 1500kg, travelling at 25m/s collides with another car B of mass 1000kg travelling at 15m/s in the same direction, the velocity of car A becomes 20m/s. calculate the velocity of car B after collision.
5. A machine gun fires 25 gm bullet at the rate of 600 bullets per minute, with a speed of 200m/s. calculate the force.
6. A body of mass 1 kg is kept at rest. A constant force of 16 N acting on it. Find the time taken by the body to cover 12m.
7. A motor car is moving with a velocity of 108km/hr and it takes 4 seconds to stop after the brakes are applied. Calculate the force exerted by the brakes on the motorcar if its mass along with the passengers is 1000kg.
8. Two hockey players of opposite teams, while trying to hit on the ground collide and immediately become entangled. One has a mass of 60 kg and was moving with a velocity 5 m/s while the other has a mass of 55 kg and was moving faster with a velocity of 6m/s towards the first player. In which direction and with what velocity will they move after they become entangled?
9. A girl of mass 40 kg jumps with a horizontal velocity of 5m/s onto a stationary cart with frictionless wheels. The mass of the cart is 3 kg. what is her velocity as the cart start moving?
10. A truck of mass 2500kg moving at 15m/s collides with a car of mass 1000 kg moving at 5m/s in the opposite direction. With what velocity would the two move together?
11. A force of 4 N acts on a body of mass 2 kg for 4 seconds. The object is initially at rest. Calculate a) final velocity b) the distance covered in 10 s after the force acting.
12. A 150 gm ball travelling at 30 m/s strikes the palm of a player's hand and is stopped in 0.06 sec. calculate the force exerted by the ball.

13.



a) what is the distance travelled by the car in first two

seconds? If the mass is 1000 kg.

b) what is the force applied after 5 seconds to bring the car stop within one second?

