

# H.W

## Question and Answer.

1. > When a net zero external unbalance force is applied on the body, it is possible for the object to be travelling with a non-zero velocity. In fact once an object come into motion and there is an condition in which its motion is unopposed by an external force. The object will continue to remain in motion.

~~Q.1~~  
2.} Inertia

Definition: Inertia is a property or tendency of every object to resist any change in its state of rest or uniform motion in a straight line.

It is measured by the mass of an object. The heavier the object, the greater will be its inertia.

Types of Force: ~~Two~~ Balanced and unbalanced force

Balanced Force: If the resultant of all the force acting on a body is zero, the forces are called balanced force, when two forces of equal magnitude but acting in opposite direction on an object simultaneously then the object continues in its state of rest or of uniform motion in a straight line. Such forces acting on object are known as ~~non~~ balanced forces.

Ex- ~~A~~ ~~the~~ tug of war, A station  
-ary object etc.

## Unbalanced force

If the resultant of applied forces are greater than zero, the forces are called unbalanced forces.

To move an object unbalanced forces are to be applied from the opposite direction. In case of unbalanced forces acting on a body, it moves in the direction of the greater force.

4.) Inertia of train is greater than  
the bicycle  
Inertia of 1Rs coin is greater  
than the 5Rs coin.