

17.7.2021

HOMEWORK

Q1. An object experiences a net ~~or~~ zero external ~~or~~ unbalanced force. Is it possible for the object to be travelling with a non-zero velocity? If yes, state the conditions that must be placed on the magnitude and direction of the velocity. If no, provide a reason.

Ans:- Yes, it is possible for the object to travel with a non-zero velocity.

~~The~~ It is possible only if object's velocity remains constant.

The conditions are:-

1. ~~The~~ Magnitude of velocity doesn't change.
2. Direction of object doesn't change.

Q2. Differentiate balanced and unbalanced force.

Ans:- Balanced force

1. If the resultant of all the forces acting on a body is zero, the forces

Unbalanced force

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

are called balanced force.

are called unbalanced force

1. Ex:- A stationary object is an example of balanced force.

2. Ex:- When we drag a box on the floor, there is an unbalanced force acting on the box.