

Work sheet

- (i) An object experiences a net ^{zero} external unbalanced ^{on} 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.
- (ii) Differentiate balanced and unbalanced force.

Ans Yes, the object can travel with a net zero external unbalanced force. It is possible for the object if it travels with constant velocity in ~~the~~ same direction.

- (i)
- | <u>BALANCED FORCE</u> | <u>UNBALANCED FORCE</u> |
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| * When two ^{or more} forces act on an object in opposite direction | * When two or more act on an object in opposite direction then, if the net force obtained is not zero it is said to be as Unbalanced force |
| then,
if the net force obtained is zero it is said to be as Balanced force | |