

When a bus suddenly takes a turn, the passengers are thrown outwards because of

- a. Inertia of motion
- b. Inertia of direction
- c. Acceleration of motion
- d. Speed of motion

Please explain this question and which of the following is the correct with whole explanation?

When a bus suddenly takes a turn, the passengers are thrown outwards because of inertia of direction.

An inability of an object to change its direction of motion by itself is called inertia of direction.

When a bus is running along a straight-line path, the passengers also move with the same speed in a straight line but when the bus takes a turn suddenly, the upper portion of the body of passengers continues to be in straight line motion while the lower portion of the body tends to take a turn along with the bus and passengers tend to fall outwards.