

Module 01 - Lesson 4

Average Acceleration

Question 1: A giant eruption on the Sun moves solar material from rest to 600 km/s over a period of 1 h. Find the average acceleration of the solar material.

Question 2: Starting from rest, a subway train first accelerates to 20 m/s, then brakes. Fifty seconds after starting, the train is moving at 15 m/s. Find the average acceleration of the train in this 50-s interval?

Problem: A car moving initially at 50 km/h begins slowing down at a constant rate, 50 m before the stop sign. If the car comes to a full stop just at the light, what is the magnitude of its average acceleration?