Module 07 - Lesson 2

Constant Forces and Impulse

Question 1: What is the impulse on a 3.0 kg particle that experiences a force of 10 N for 5 s?

Question 2: A car stops at a stop sign, and then accelerates from rest to 54.0 km/h in 1.2 s. Find the magnitude of the impulse experienced by a 60-kg passenger while the car accelerates.

Problem: A 0.06-kg tennis ball ~~is hit against a wall located 1-m away by applying a force of 30 N~~. ~~The final velocity of the ball 80% of the initial speed.~~ Calculate the impulse experienced by the ball if the impact time is ~~1.5 s~~.