Question Paper

Topic 1: Mechanics

Q1. A car is traveling at a speed of 60 km/h. How far will it travel in 3 hours?

Answer: 180 km

Explanation: Distance = Speed x Time. Distance = 60 km/h x 3 h = 180 km.

Q2. If a force of 50 N is applied to an object with a mass of 10 kg, what is the acceleration of the object?

Answer: 5 m/s^2

Explanation: Acceleration = Force / Mass. Acceleration = $50 \text{ N} / 10 \text{ kg} = 5 \text{ m/s}^2$.