ALBERTA PHYSICS 30 · UNIT A · 5 QUESTIONS

Momentum & Impulse — Practice Test

This practice test was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

1 **A golf ball with a mass of 0.045 kg is struck and leaves the club at 40 m/s. The magnitude of the momentum of the ball is**

- **A** 3.6 kg · m/s
- **B** 40 kg · m/s
- **C** 1.8 kg · m/s
- **D** 8.9×10^2 kg · m/s

Understand It with Pulse | Flag a mistake

2 **The impulse experienced by an object is equal to the object's**

- **A** change in momentum
- **B** change in kinetic energy
- **C** net force
- **D** change in velocity

Understand It with Pulse | Flag a mistake

3 **Two small metal dynamics carts on a straight aluminium track on a laboratory bench, one cart touching the other as they collide, plain light background. A 0.80 kg cart moving at 4.0 m/s collides with a stationary 1.2 kg cart on a frictionless track. The carts stick together. Their common speed immediately after the collision is**



A 4.0 m/s

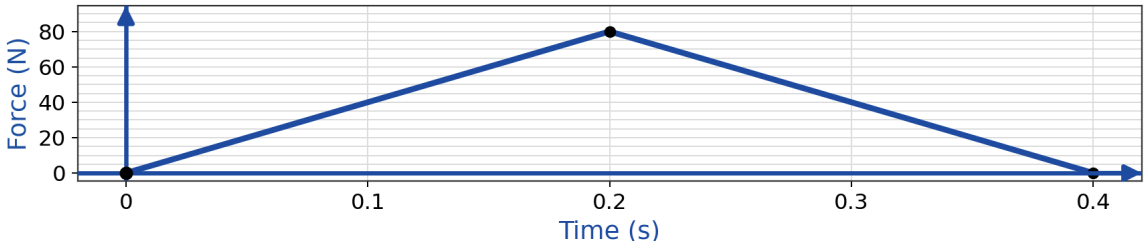
B 1.6 m/s

C 3.2 m/s

D 2.0 m/s

Understand It with Pulse | Flag a mistake

4 **The graph shows the net force on a cart against time. The impulse delivered to the cart, in newton seconds, is _____**



ANSWER

Understand It with Pulse | Flag a mistake

5 **A 0.50 kg cart moving at 4.0 m/s undergoes an elastic collision with an identical stationary cart. The speed of the first cart immediately after the collision is**

A 2.0 m/s

B 4.0 m/s

C 2.8 m/s

D 0 m/s

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. C
2. A
3. B
4. 16
5. D

© 2026 Brett Robbins. All Rights Reserved.