NOVA SCOTIA PHYSICS 12 · UNIT B · 10 QUESTIONS

Static Equilibrium, Gravitation and Collisions — 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 **An object of mass 8 kilograms moves at 5 metres per second. Its momentum, in kilogram metres per second, is**



ANSWER

Understand It with Pulse | Flag a mistake

2 **A 5 kilogram object moving at 8 metres per second collides with a stationary 5 kilogram object and they stick together. Their common speed, in metres per second, is**



ANSWER

Understand It with Pulse | Flag a mistake

3 **A 2 kilogram object moving at 9 metres per second collides with a stationary 4 kilogram object and they stick together. Their common speed, in metres per second, is**

ANSWER

Understand It with Pulse | Flag a mistake

4 **A planet surface gravity is 4 metres per second squared. If the planet mass doubles with the same radius, the new surface gravity is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **A planet surface gravity is 12 metres per second squared. If the planet mass doubles with the same radius, the new surface gravity is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A beam weighs 80 newtons and is supported equally at two ends. Each support force, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A beam weighs 150 newtons and is supported equally at two ends. Each support force, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **The gravitational field strength near Earth is about**

A 9.8 newtons per kilogram

B 1 newton per kilogram

C 20 newtons per kilogram

D 0 newtons per kilogram

Understand It with Pulse | Flag a mistake

9 **A stable object has a low centre of gravity and a**

A narrow base

B wide base

C high mass

D small weight

Understand It with Pulse | Flag a mistake

10 **Impulse equals change in**

A energy

B mass

C momentum

D speed only

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 40
2. 4
3. 3
4. 8
5. 24
6. 40
7. 75
8. A
9. B
10. C

© 2026 Brett Robbins. All Rights Reserved.