NOVA SCOTIA ADVANCED PHYSICS 12 · UNIT B

Static Equilibrium, Gravitation and Collisions — Practice Test

Nova Scotia Advanced Physics 12 • 10 questions

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 **Objects of momentum 25 and 25 kilogram metres per second move in the same direction and stick together. Their total momentum is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A 3 kilogram object at 10 metres per second collides with a 2 kilogram object at 5 metres per second in the opposite direction. The total momentum, in kilogram metres per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A 8 kilogram object at 3 metres per second collides with a 4 kilogram object at 2 metres per second in the opposite direction. The total momentum, in kilogram metres per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Surface gravity is 9.8 metres per second squared. At a distance of 2 Earth radii from the centre, the gravity is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **Surface gravity is 16 metres per second squared. At a distance of 2 Earth radii from the centre, the gravity is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A uniform beam weighs 120 newtons and carries a load of 60 newtons at its centre. The total upward support force needed, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A uniform beam weighs 60 newtons and carries a load of 40 newtons at its centre. The total upward support force needed, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **Escape velocity depends on the mass and radius of the**

A planet

B satellite

C atmosphere

D orbit shape

Understand It with Pulse | Flag a mistake

9 **A satellite in circular orbit has acceleration directed towards the**

A Sun only

B centre of the planet

C satellite

D tangent

Understand It with Pulse | Flag a mistake

10 **Impulse from a force over time equals the change in**

A kinetic energy

B potential energy

C momentum

D speed only

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	50	**5.**	4	**9.**	B
2.	20	**6.**	180	**10.**	C
3.	16	**7.**	100		
4.	2.45	**8.**	A		

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