NEWFOUNDLAND AND LABRADOR PHYSICS 2204 · UNIT B

Dynamics — Practice Test

Newfoundland and Labrador Physics 2204 • 25 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 **A wooden crate of mass 5 kg accelerates at 4 m per second squared. The net force, in newtons, is**



ANSWER _____

Understand It with Pulse | Flag a mistake

2 **A net force of 40 N acts on a 8 kg mass. Its acceleration, in metres per second squared, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **A 20 kg mass has weight , using g = 9.8 m per second squared , in newtons , of**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Apply the definition carefully. Newton first law states that an object at rest stays at rest unless acted on by**

A gravity only

B friction only

C a balanced force

D an unbalanced force

Understand It with Pulse | Flag a mistake

5 **Consider the meaning of the term. Newton third law states that forces always occur in**

A equal and opposite pairs

B the same direction

C one direction only

D pairs of different sizes

Understand It with Pulse | Flag a mistake

6 **A sled has normal force 200 N and coefficient of friction 0.3. The maximum static friction, in newtons, is**



ANSWER _____

Understand It with Pulse | Flag a mistake

7 **Two horizontal forces of 60 N and 25 N act in opposite directions. The net force, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **A 20 kg block rests on a slope at 30°. The component of weight parallel to the slope, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **A 5 kg block rests on a slope at 30 degrees. The normal force, to one decimal place, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **Use what the term means. If the net force on a race car is zero, its acceleration is**



A increasing

B zero

C equal to gravity

D undefined

Understand It with Pulse | Flag a mistake

11 **Think about the rule. An astronaut mass on the Moon compared with on Earth is**

A smaller

B larger

C the same

D zero

Understand It with Pulse | Flag a mistake

12 **A 8 kg block accelerates at 3 m per second squared against friction of 6 N. The applied force, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

13 **A 60 kg person stands in an elevator accelerating upward at 2 m per second squared . The normal force , in newtons , using g = 9.8 , is**

ANSWER _____

Understand It with Pulse | Flag a mistake

14 **Consider the rule in general. Inertia is a measure of an object resistance to a change in motion, and it depends on**

A weight only

B mass

C volume only

D temperature

Understand It with Pulse | Flag a mistake

15 **A bowling ball of mass 4 kg accelerates at 6 m per second squared. The net force, in newtons, is**



ANSWER

Understand It with Pulse | Flag a mistake

16 **A net force of 50 N acts on a 10 kg mass. Its acceleration, in metres per second squared, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **A 10 kg mass has weight , using g = 9.8 m per second squared , in newtons , of**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **Apply the concept. Newton first law states that an object at rest stays at rest unless acted on by**

A gravity only

B an unbalanced force

C friction only

D a balanced force

Understand It with Pulse | Flag a mistake

19 **Consider the concept in general. Newton third law states that forces always occur in**

A the same direction

B one direction only

C equal and opposite pairs

D pairs of different sizes

Understand It with Pulse | Flag a mistake

20 **A wagon has normal force 50 N and coefficient of friction 0.4. The maximum static friction, in newtons, is**



ANSWER _____

Understand It with Pulse | Flag a mistake

21 **Two horizontal forces of 50 N and 20 N act in opposite directions. The net force, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A 10 kg block rests on a slope at 30°. The component of weight parallel to the slope, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A 20 kg block rests on a slope at 30 degrees. The normal force, to one decimal place, in newtons, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **Consider the principle in general. If the net force on a car is zero, its acceleration is**



A increasing

B equal to gravity

C undefined

D zero

Understand It with Pulse | Flag a mistake

25 **Review the principle. An astronaut mass on the Moon compared with on Earth is**

A the same

B smaller

C larger

D zero

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	20	**10.**	B	**19.**	C
2.	5	**11.**	C	**20.**	20
3.	196	**12.**	30	**21.**	30
4.	D	**13.**	708	**22.**	49
5.	A	**14.**	B	**23.**	169.7
6.	60	**15.**	24	**24.**	D
7.	35	**16.**	5	**25.**	A
8.	98	**17.**	98		
9.	42.4	**18.**	B		

© 2026 Brett Robbins. All Rights Reserved.