PRINCE EDWARD ISLAND PHYSICS 11 · UNIT B

Dynamics — Practice Test

Prince Edward Island Physics 11 • 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 net force acts on a 5 kilogram wooden crate, giving it an acceleration of 4 metres per second squared. What is the net force in newtons**



ANSWER

Understand It with Pulse | Flag a mistake

2 **A net force of 20 newtons acts on a mass of 4 kilograms. What is the acceleration in metres per second squared**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **Two forces act in opposite directions on an object, with magnitudes 30 newtons and 10 newtons. What is the magnitude of the net force in newtons**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **Using g = 10 metres per second squared , what is the weight in newtons of a 5 kilogram bowling ball**



ANSWER

Understand It with Pulse | Flag a mistake

5 **A larger mass requires a larger force to achieve the same**

A velocity

B acceleration

C distance

D time

Understand It with Pulse | Flag a mistake

6 **An object at rest remains at rest unless acted on by a**

A balanced force

B net force

C friction only

D normal force only

Understand It with Pulse | Flag a mistake

7 **Friction opposes the**

A applied force only

B normal force only

C weight only

D relative motion between surfaces

Understand It with Pulse | Flag a mistake

8 **Gravitational force between two masses decreases when their separation**

A decreases

B stays constant

C becomes zero

D increases

Understand It with Pulse | Flag a mistake

9 **Gravitational force between two masses increases when their masses**

A decrease

B stay constant

C increase

D become zero

Understand It with Pulse | Flag a mistake

10 **If the net force on a car is zero, its velocity is**



A constant

B zero always

C increasing

D decreasing

Understand It with Pulse | Flag a mistake

11 **Inertia is a measure of an object's resistance to a change in**

- A mass
- B motion
- C weight
- D speed only

Understand It with Pulse | Flag a mistake

12 **Mass measures the amount of matter and does not change with**

- A gravity
- B location
- C weight
- D force

Understand It with Pulse | Flag a mistake

13 **Newton's first law is also called the law of**

A inertia

B action and reaction

C gravitation

D conservation

Understand It with Pulse | Flag a mistake

14 **Newton's second law states that the net force on a race car equals its mass times**



A velocity

B distance

C acceleration

D time

Understand It with Pulse | Flag a mistake

15 **Newton's third law states that forces always occur in**

A single forces

B unbalanced pairs

C zero pairs

D equal and opposite pairs

Understand It with Pulse | Flag a mistake

16 **One newton is defined as the force that gives a 1 kilogram mass an acceleration of**

A 1 metre per second

B 1 metre per second squared

C 9.8 metres per second squared

D 10 metres per second squared

Understand It with Pulse | Flag a mistake

17 **Terminal velocity is reached when air resistance**

A becomes zero

B exceeds weight greatly

C balances weight

D is ignored

Understand It with Pulse | Flag a mistake

18 **The normal force acts**

A perpendicular to a surface

B parallel to a surface

C downward always

D in the direction of motion

Understand It with Pulse | Flag a mistake

19 **The SI unit of force is the**

A newton

B joule

C watt

D kilogram

Understand It with Pulse | Flag a mistake

20 **A net force acts on a 10 kilogram wagon, giving it an acceleration of 3 metres per second squared. What is the net force in newtons**



ANSWER

Understand It with Pulse | Flag a mistake

21 **A net force of 30 newtons acts on a mass of 5 kilograms. What is the acceleration in metres per second squared**

ANSWER

Understand It with Pulse | Flag a mistake

22 **Two forces act in opposite directions on an object, with magnitudes 50 newtons and 20 newtons. What is the magnitude of the net force in newtons**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **Using g = 10 metres per second squared , what is the weight in newtons of a mass of 10 kilograms**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A net force acts on a mass of 4 kilograms, giving it an acceleration of 5 metres per second squared. What is the net force in newtons**

ANSWER _____

Understand It with Pulse | Flag a mistake

25 **A net force of 40 newtons acts on an 8 kilogram rock. What is the acceleration in metres per second squared**



ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	20	**10.**	A	**19.**	A
2.	5	**11.**	B	**20.**	30
3.	20	**12.**	B	**21.**	6
4.	50	**13.**	A	**22.**	30
5.	B	**14.**	C	**23.**	100
6.	B	**15.**	D	**24.**	20
7.	D	**16.**	B	**25.**	5
8.	D	**17.**	C		
9.	C	**18.**	A		

© 2026 Brett Robbins. All Rights Reserved.