GRAVITATIONAL MOTION AND UNIVERSAL GRAVITATION - PRACTICE TEST | NEW BRUNSWICK PHYSICS 121-122 · UNIT D · 10 QUESTIONS

# Gravitational Motion and Universal Gravitation, 10-question test — 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 weighs 80 newtons on Earth. On a planet with gravity twice Earth it weighs**

Question 1

An object weighs 80 newtons on Earth. On a planet with gravity twice Earth it weighs

ANSWER

Understand It with Pulse | Flag a mistake

2

**A planet has 4 times Earth mass and twice Earth radius. Its surface gravity relative to Earth is**

Question 2

A planet has 4 times Earth mass and twice Earth radius. Its surface gravity relative to Earth is

ANSWER

Understand It with Pulse | Flag a mistake

## 3 Newton law of gravitation applies to

Question 3

Newton law of gravitation applies to

A) all masses

B) planets only

C) stars only

D) Earth only

A all masses

B planets only

C stars only

D Earth only

Understand It with Pulse

Flag a mistake

## 4 The Moon orbits Earth because of

Question 4

The Moon orbits Earth because of

A) magnetism

B) gravity

C) friction

D) inertia only

A magnetism

B gravity

C friction

D inertia only

Understand It with Pulse

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## 5 A geosynchronous orbit has a period of

Question 5

A geosynchronous orbit has a period of

A) one year

B) one hour

C) one day

D) one month

A one year

B one hour

C one day

D one month

Understand It with Pulse

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## 6 Field strength decreases with distance from a mass because the field

Question 6

Field strength decreases with distance from a mass because the field

A) disappears

B) increases

C) reverses

D) spreads out

A disappears

B increases

C reverses

D spreads out

Understand It with Pulse

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## 7 An orbit is stable when centripetal force equals

Question 7

An orbit is stable when centripetal force equals

A) gravitational force

B) weight

C) friction

D) normal force

A gravitational force

B weight

C friction

D normal force

Understand It with Pulse

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## 8 The gravitational field inside a hollow spherical shell is

Question 8

The gravitational field inside a hollow spherical shell is

A) maximum

B) zero

C) constant nonzero

D) inward

A maximum

B zero

C constant nonzero

D inward

Understand It with Pulse

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## 9 A planet farther from the Sun has a longer orbital

Question 9

A planet farther from the Sun has a longer orbital

A) day

B) year only

C) period

D) radius only

A day

B year only

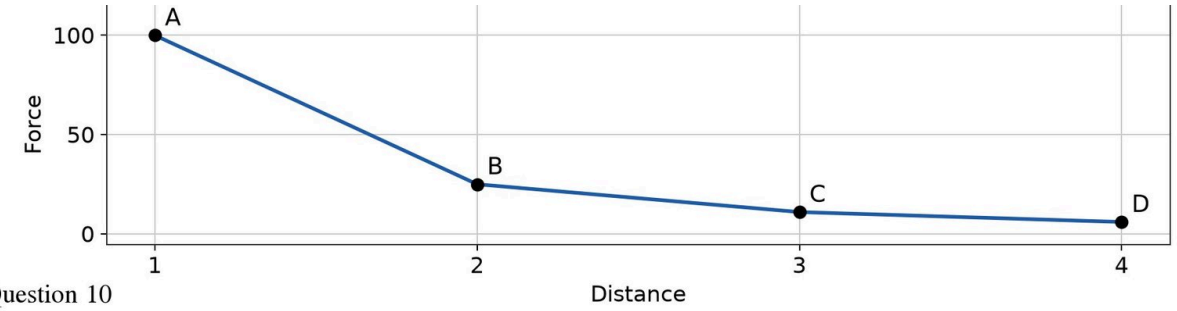
C period

D radius only

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**10** **The graph shows force decreasing with distance. The relationship is an**




Question 10

The graph shows force decreasing with distance. The relationship is an

A) inverse law only

B) square law

C) linear law

D) inverse square law

**A** inverse law only

**B** square law

**C** linear law

**D** inverse square law

**Understand It with Pulse** **Flag a mistake**

# ANSWER KEY

1. 160
2. 1
3. A
4. B
5. C
6. D
7. A
8. B
9. C
10. D

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