Kinematics and Dynamics, 5-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 **A red race car speeds up. An object starts from rest and accelerates at 5 m/s² for 6 s. Its final speed is**



Question 1

A red race car speeds up. An object starts from rest and accelerates at 5 m/s^2 for 6 s. Its final speed is

A) 11 m/s

B) 30 m/s

C) 1.2 m/s

D) 0.83 m/s

- **A** 11 m/s
- **B** 30 m/s
- **C** 1.2 m/s
- **D** 0.83 m/s

Understand It with Pulse | Flag a mistake

2

An object moves at 4 m/s and accelerates at 3 m/s² for 2 s. Its displacement is

Question 2

An object moves at 4 m/s and accelerates at 3 m/s^2 for 2 s. Its displacement is

A) 14 m

B) 8 m

C) 20 m

D) 6 m

A 14 m

B 8 m

C 20 m

D 6 m

Understand It with Pulse

Flag a mistake

3

Use g = 10 m/s². An object dropped from rest falls for 4 s. The distance it falls is

Question 3

Use $g = 10\ \text{m/s}^2$. An object dropped from rest falls for 4 s. The distance it falls is

A) 40 m

B) 160 m

C) 80 m

D) 20 m

A 40 m

B 160 m

C 80 m

D 20 m

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4 A 10 kg object is pushed with a net force of 40 N. Its acceleration is

Question 4

A 10 kg object is pushed with a net force of 40 N. Its acceleration is

A) 400 m/s^2

B) 0.25 m/s^2

C) 50 m/s^2

D) 4 m/s^2

- **A** 400 m/s²
- **B** 0.25 m/s²
- **C** 50 m/s²
- **D** 4 m/s²

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5 Use g = 10 m/s². The weight of a 12 kg object, in newtons, is ____

Question 5

Use $g = 10\ m/s^2$. The weight of a 12 kg object, in newtons, is ____

ANSWER _____

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ANSWER KEY

1. B
2. A
3. C
4. D
5. 120

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