CONNECTICUT PHYSICS · UNIT 1 · 25 QUESTIONS

Kinematics and Dynamics — 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 moves at constant speed 10 meters per second for 3 seconds. The distance traveled is**

ANSWER _____

Understand It with Pulse | Flag a mistake

2 **An object moves at constant speed 20 meters per second for 2 seconds. The distance traveled is**

ANSWER _____

Understand It with Pulse | Flag a mistake

3 **An object moves at constant speed 5 meters per second for 6 seconds. The distance traveled is**

ANSWER _____

Understand It with Pulse | Flag a mistake

4 **An object moves at constant speed 15 meters per second for 4 seconds. The distance traveled is**

ANSWER _____

Understand It with Pulse | Flag a mistake

5 **An object moves at constant speed 12 meters per second for 5 seconds. The distance traveled is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **An object travels 60 meters in 3 seconds at constant speed. Its speed is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **An object travels 100 meters in 5 seconds at constant speed. Its speed is**

ANSWER _____

Understand It with Pulse | Flag a mistake

8 **An object travels 45 meters in 3 seconds at constant speed. Its speed is**

ANSWER _____

Understand It with Pulse | Flag a mistake

9 **An object travels 120 meters in 4 seconds at constant speed. Its speed is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **An object travels 90 meters in 6 seconds at constant speed. Its speed is**

ANSWER _____

Understand It with Pulse | Flag a mistake

11 **An object accelerates from rest at a constant rate so that after 4 seconds its speed is 20 meters per second. Its acceleration is**

ANSWER _____

Understand It with Pulse | Flag a mistake

12 **An object accelerates from rest at a constant rate so that after 3 seconds its speed is 30 meters per second. Its acceleration is**

ANSWER

Understand It with Pulse | Flag a mistake

13 **An object accelerates from rest at a constant rate so that after 5 seconds its speed is 10 meters per second. Its acceleration is**

ANSWER

Understand It with Pulse | Flag a mistake

14 **An object accelerates from rest at a constant rate so that after 2 seconds its speed is 40 meters per second. Its acceleration is**

ANSWER

Understand It with Pulse | Flag a mistake

15 **An object accelerates from rest at a constant rate so that after 4 seconds its speed is 25 meters per second. Its acceleration is**

ANSWER

Understand It with Pulse | Flag a mistake

16 **A net force acts on a mass of 5 kilograms with acceleration 2 meters per second squared. The net force is**

ANSWER _____

Understand It with Pulse | Flag a mistake

17 **A net force acts on a mass of 10 kilograms with acceleration 3 meters per second squared. The net force is**

ANSWER _____

Understand It with Pulse | Flag a mistake

18 **A net force acts on a mass of 4 kilograms with acceleration 5 meters per second squared. The net force is**

ANSWER _____

Understand It with Pulse | Flag a mistake

19 **A net force acts on a mass of 20 kilograms with acceleration 2 meters per second squared. The net force is**

ANSWER _____

Understand It with Pulse | Flag a mistake

20 **A net force acts on a mass of 8 kilograms with acceleration 4 meters per second squared. The net force is**

ANSWER _____

Understand It with Pulse | Flag a mistake

21 **A mass of 10 kilograms has weight, using g equals 10 meters per second squared, of**

ANSWER _____

Understand It with Pulse | Flag a mistake

22 **A mass of 5 kilograms has weight, using g equals 10 meters per second squared, of**

ANSWER _____

Understand It with Pulse | Flag a mistake

23 **A mass of 20 kilograms has weight, using g equals 10 meters per second squared, of**

ANSWER _____

Understand It with Pulse | Flag a mistake

24 **A mass of 3 kilograms has weight, using g equals 10 meters per second squared, of**

ANSWER

Understand It with Pulse | Flag a mistake

25 **A mass of 15 kilograms has weight, using g equals 10 meters per second squared, of**

ANSWER

Understand It with Pulse | Flag a mistake

ANSWER KEY

1.	30	**10.**	15	**19.**	40
2.	40	**11.**	5	**20.**	32
3.	30	**12.**	10	**21.**	100
4.	60	**13.**	2	**22.**	50
5.	60	**14.**	20	**23.**	200
6.	20	**15.**	6	**24.**	30
7.	20	**16.**	10	**25.**	150
8.	15	**17.**	30		
9.	30	**18.**	20		

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