PHYSICS · DELAWARE

Physics
Practice Test

Unit 1: Kinematics and Dynamics

25 Questions

Original practice test based on the Delaware curriculum. Work through each question, then check your answers at the end.

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.

© 2026 Brett Robbins. All Rights Reserved.



Question 1

A race car speeds up from rest to 40 meters per second in 2 seconds. Its acceleration in meters per second squared is

Understand It with Pulse Flag a mistake

Question 2

A mass of 5 kilograms accelerates at 4 meters per second squared. The net force in newtons is

Understand It with Pulse Flag a mistake

Question 3

Using $g = 10$ meters *per* second squared , *the* weight *in* newtons *of a* 20 kilogram mass *is*

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 4

An object travels 100 meters in 5 seconds. Its average speed in meters per second is

Understand It with Pulse Flag a mistake



Question 5

A car speeds up from rest to 20 meters per second in 5 seconds. Its acceleration in meters per second squared is

Understand It with Pulse Flag a mistake

Question 6

A mass of 5 kilograms accelerates at 3 meters per second squared. The net force in newtons is

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 7

Using $g = 10$ meters *per* second squared , *the* weight *in* newtons *of a* 2 kilogram mass *is*

Understand It with Pulse Flag a mistake

Question 8

An object travels 20 meters in 5 seconds. Its average speed in meters per second is

Understand It with Pulse Flag a mistake

Question 9

An object speeds up from rest to 10 meters per second in 2 seconds. Its acceleration in meters per second squared is

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.



Question 10

A bowling ball with a mass of 5 kilograms accelerates at 2 meters per second squared. The net force in newtons is

Understand It with Pulse | Flag a mistake

Question 11

Using $g = 10$ meters *per* second squared , *the* weight *in* newtons *of a* 10 kilogram mass *is*

Understand It with Pulse | Flag a mistake

Question 12

An object travels 20 meters in 2 seconds. Its average speed in meters per second is

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 13

A mass of 10 kilograms accelerates at 3 meters per second squared. The net force in newtons is

Understand It with Pulse Flag a mistake

Question 14

An object travels 40 meters in 10 seconds. Its average speed in meters per second is

Understand It with Pulse Flag a mistake



Question 15

A car speeds up from rest to 30 meters per second in 10 seconds. Its acceleration in meters per second squared is

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 16

A mass of 4 kilograms accelerates at 2 meters per second squared. The net force in newtons is

Understand It with Pulse Flag a mistake

Question 17

An object travels 40 meters in 5 seconds. Its average speed in meters per second is

Understand It with Pulse Flag a mistake

Question 18

An object speeds up from rest to 20 meters per second in 2 seconds. Its acceleration in meters per second squared is

Understand It with Pulse Flag a mistake

Question 19

An object travels 60 meters in 5 seconds. Its average speed in meters per second is

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.



Question 20

A cart with a mass of 4 kilograms accelerates at 4 meters per second squared. The net force in newtons is

Understand It with Pulse | Flag a mistake

Question 21

An object travels 120 meters in 10 seconds. Its average speed in meters per second is

Understand It with Pulse | Flag a mistake

Question 22

An object travels 120 meters in 5 seconds. Its average speed in meters per second is

Understand It with Pulse | Flag a mistake

Question 23

A mass of 10 kilograms accelerates at 4 meters per second squared. The net force in newtons is

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

Question 24

An object travels 40 meters in 4 seconds. Its average speed in meters per second is

Understand It with Pulse Flag a mistake



Question 25

A race car speeds up from rest to 30 meters per second in 4 seconds. Its acceleration in meters per second squared is

Understand It with Pulse Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

ANSWER KEY

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

© 2026 Brett Robbins. All Rights Reserved.