BRITISH COLUMBIA PHYSICS 12 (MPH--12) · UNIT A · 10 QUESTIONS

Vectors and Kinematics — 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 stone is dropped from rest. Using g = 9.8 m per s squared, its speed after 5 s, in metres per second, is**



ANSWER

Understand It with Pulse | Flag a mistake

2 **A projectile moves horizontally at 25 m per s for 2 s. Its horizontal distance, in metres, is**

ANSWER

Understand It with Pulse | Flag a mistake

3 **A projectile is launched with a vertical speed of 29.4 m per s. Using g = 9.8 m per s squared, its total flight time, in seconds, is**

ANSWER

Understand It with Pulse | Flag a mistake

4 **A displacement of 5 m east plus 12 m north has a magnitude, in metres, of**

ANSWER

Understand It with Pulse | Flag a mistake

5 **A displacement of 13 m has a horizontal component of 5 m. Its vertical component, in metres, is**

ANSWER

Understand It with Pulse | Flag a mistake

6 **A train travels east at 30 m per s. A passenger walks west at 2 m per s relative to the train. The speed of the passenger relative to the ground, in metres per second, is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **Displacement differs from distance travelled because displacement**

A includes direction

B is always larger

C ignores the starting point

D is measured in seconds

Understand It with Pulse | Flag a mistake

8 **An object slowing down in a straight line has an acceleration that**



A points opposite to its velocity

B points in the same direction as its velocity

C is always zero

D points upward

Understand It with Pulse | Flag a mistake

9 **Ignoring air resistance, the vertical acceleration of a projectile is**

A zero

B 9.8 m per s squared downward

C 9.8 m per s squared upward

D increasing with time

Understand It with Pulse | Flag a mistake

10 **Two vectors of 10 m and 6 m in the same direction combine to a resultant, in metres, of**

A 4

B 6

C 10

D 16

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. 49
2. 50
3. 6
4. 13
5. 12
6. 28
7. A
8. A
9. B
10. D

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