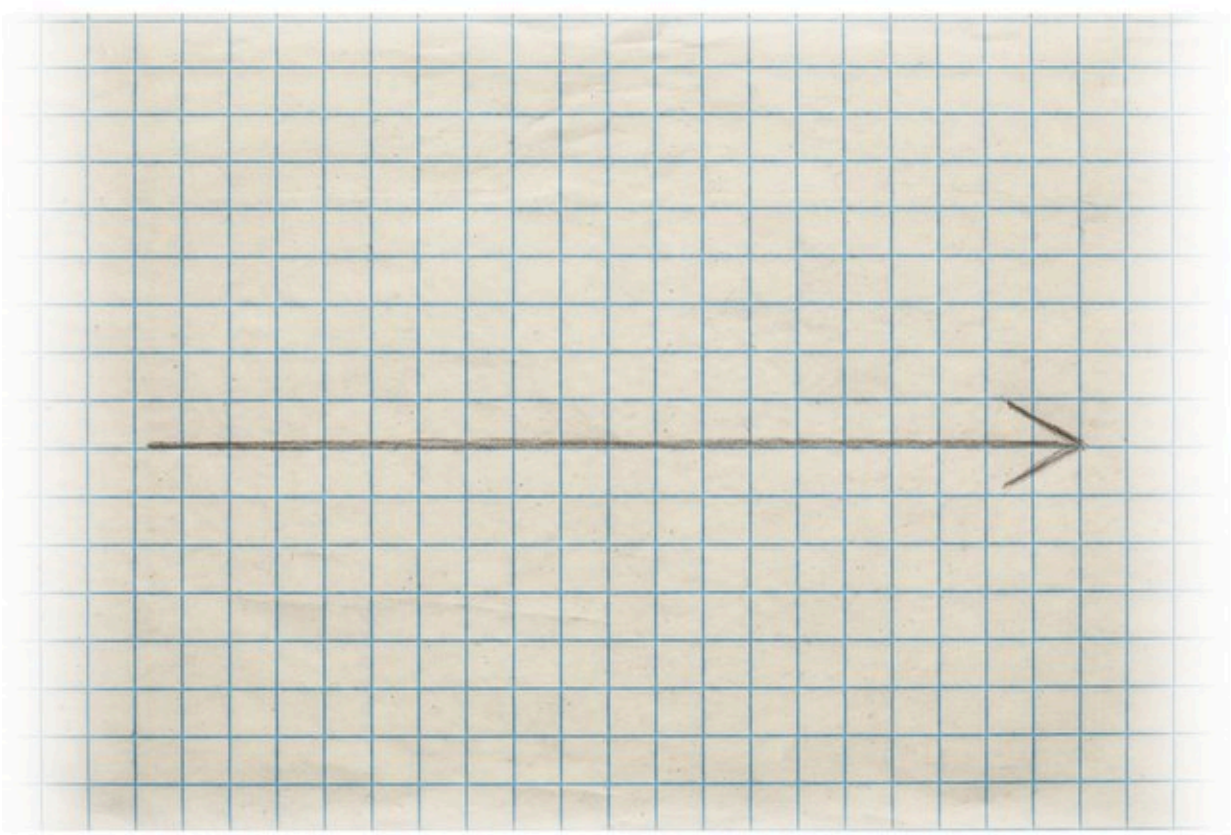
NEWFOUNDLAND AND LABRADOR PHYSICS 3204 · UNIT A · 10 QUESTIONS

Application of Vectors — 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 **The vertical component of a vector at 0 degrees to the horizontal is**



A equal to magnitude

B zero

C negative magnitude

D undefined

Understand It with Pulse Flag a mistake

2 **Vectors are added by the parallelogram method when they act from a**

A different point only

B moving point

C common point

D fixed wall only

Understand It with Pulse Flag a mistake

3 **In two dimensions, equilibrium of forces requires the vector sum of forces to be**

A at a maximum

B vertical only

C horizontal only

D zero

Understand It with Pulse Flag a mistake

4 **A negative velocity in one dimension means motion in the opposite direction to the chosen**

- A positive direction
- B time direction
- C mass direction
- D force direction

Understand It with Pulse | Flag a mistake

5 **A displacement has components 8 metres east and 15 metres north. Its magnitude in metres is**

ANSWER _____

Understand It with Pulse | Flag a mistake

6 **A displacement has components 20 metres east and 21 metres north. Its magnitude in metres is**

ANSWER _____

Understand It with Pulse | Flag a mistake

7 **A boat speed across a river is 9 metres per second and river speed is 12 metres per second. The shore speed in metres per second is**



ANSWER

Understand It with Pulse | Flag a mistake

8 **A vector magnitude is 13 units with one component 5 units. The other component in units is**

ANSWER

Understand It with Pulse | Flag a mistake

9 **A projectile horizontal velocity is 15 metres per second. After 4 seconds, its horizontal velocity in metres per second is**

ANSWER _____

Understand It with Pulse | Flag a mistake

10 **A projectile takes 3 seconds to reach its peak . Using g = 10 , its initial vertical velocity in metres per second is**

ANSWER _____

Understand It with Pulse | Flag a mistake

ANSWER KEY

1. B
2. C
3. D
4. A
5. 17
6. 29
7. 15
8. 12
9. 15
10. 30

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