

Exam Practice (Chapter 3 & 4) Problems

Multiple Choice

Choose the letter that best completes the statement or answers the question.

- C 1. A vector is a quantity that has
- magnitude and time
 - time and direction
 - magnitude and direction
 - time
 - none
- B 2. A scalar is a quantity that has
- direction
 - magnitude
 - time
 - none
- D 3. When measuring velocity, one must
- be direction of the vector, because the direction of motion
 - the length of the vector represents the speed
 - the length of the vector is always a constant value
 - all of the above
 - none of the above
- D 4. Equator is not the composition of a vector, one should
- draw the vector with correct magnitude and other values
 - measure the value of the magnitude
 - draw a perpendicular line for vector to the diagram
 - all of the above
- B 5. Which of the following would NOT be considered a projectile?
- A cannonball thrown straight up
 - A cannonball falling from a cliff
 - A cannonball falling off the edge of a cliff
 - A cannonball thrown through the air
 - All of the above are projectiles
- C 6. The horizontal component of a projectile's velocity is independent of
- the mass of the projectile
 - time
 - the vertical component of its velocity
- A 7. In the absence of air friction, the vertical component of a projectile's velocity doesn't change at the projectile's apex
- Always false
 - Always true
 - Sometimes true
- B 8. In the absence of air friction, the horizontal component of a projectile's velocity doesn't change at the projectile's apex
- Sometimes true
 - Always true
 - Always false