

# Vector Objectives

1. Define and use the basic trigonometric functions: sine, cosine, tangent.
2. Find the inverse of the basic trigonometric functions.
3. Define and use the Pythagorean Theorem.
4. Distinguish between a scalar and a vector.
5. Know the different methods of representing a vector:  $\mathbf{v}$  ,  $\vec{v}$  , etc.
6. Define resultant vector.
7. Describe the process of resolving a vector.
8. Find the resultant vector given two perpendicular or parallel vectors.
9. Find the the resultant vector of two non-perpendicular vectors.
10. Add two vectors graphically, using the head to tail method.
11. Add two vectors analytically.
12. Understand and use "hat" notation.
13. Solve physics problems using vectors.

Honors only