Basic Physics Concepts

Scalar - only a number
- only a magnitude

Vector - magnitude and direction

Scalars

Location- where you are

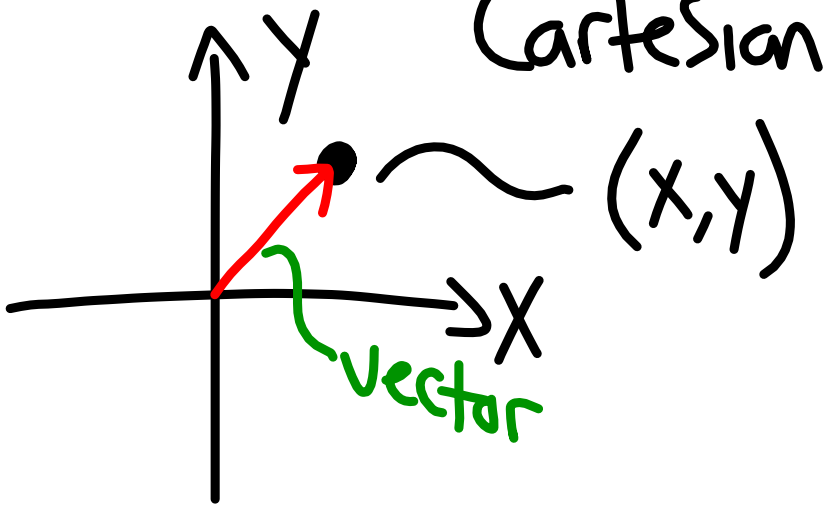
Distance- the length of the Path that you took

Speed - distance covered in a given time.

time - Progression of events relative to a point

Vectors

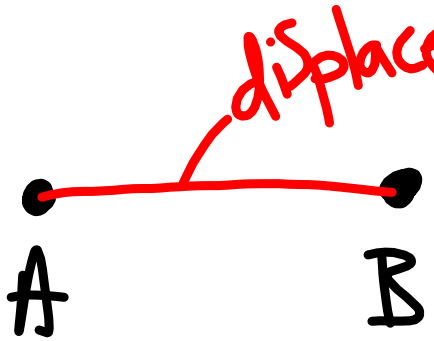
Position – where you are on Cartesian Plane



(x,y)

Unit: m

displacement – distance



between starting and ending points

Unit: m

$$\text{Velocity} = \frac{\Delta \text{displacement}}{\Delta t}$$

Unit: $\frac{m}{s}$

$$= \frac{x_f - x_i}{t_f - t_i}$$

acceleration – How much your velocity changes per second

$$= \frac{V_f - V_i}{t_f - t_i}$$

Unit: $\frac{M}{S^2}$