Graphical Kinematics Notes

scalar - has magnitude only ex. speed
vector - has magnitude & direction ex. ?

Instantaneous

speed/velocity/acceleration = “At a moment in time",
tangent lines show inst. v (on d -vs-1 graph) & inst. a (on v -vs-t graph)

delta v/delta t = a instantaneous

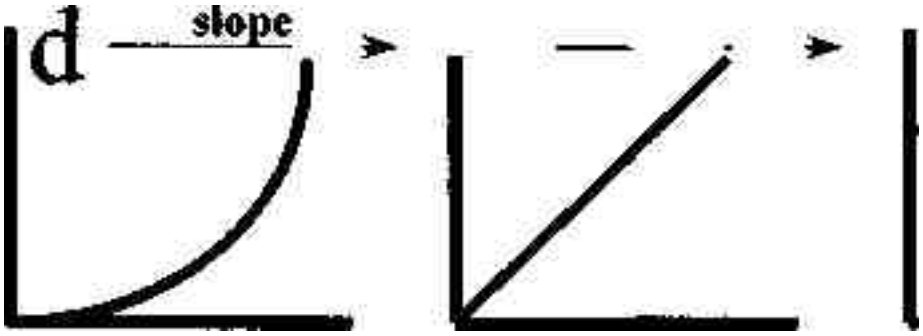
(As delta goes to
zero = dv/dt).

-The slope of the displacement/
time graph is the instaneous velocity

-The slope of the velocity/time graph
is the instaneous acceleration.

-The area under the velocity/time
graph is the displacement.

d-t, v-t and a-t graph relationship
_slope——^ slope——^



area

t