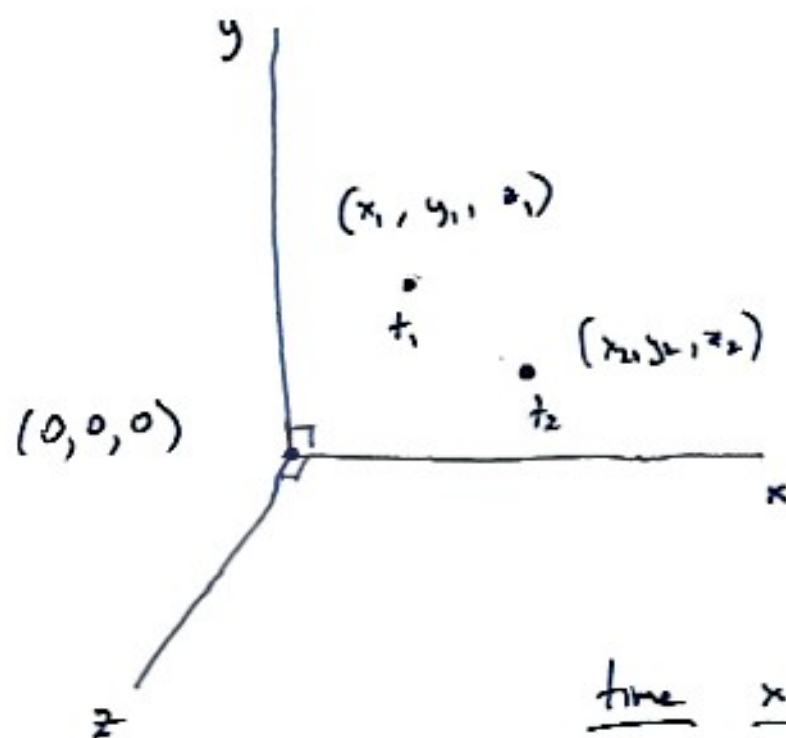


Reference frames

Kinematics: The study of motion without the concern of the forces causing motion.

movement: Δ in space
motion in some time period

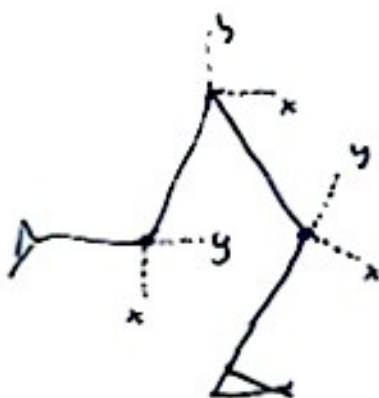


orthogonal = 90°

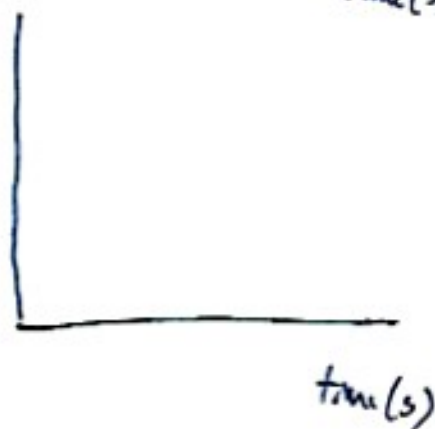
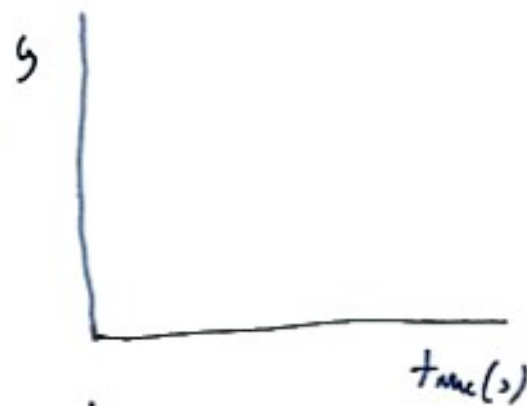
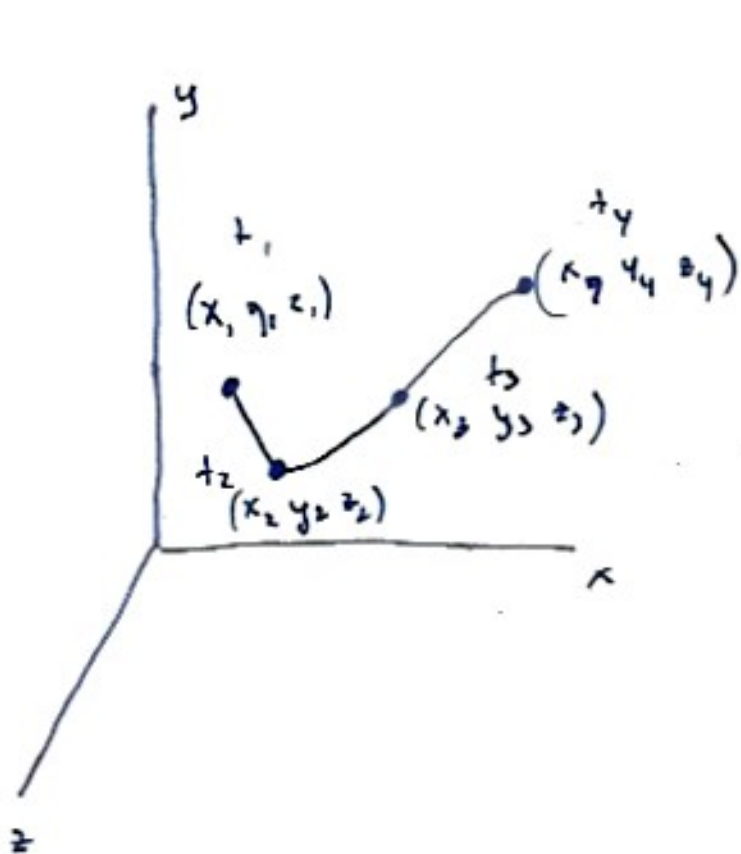
Cartesian
coordinate system

Global Reference frame

time	x	y	z
t_1	x_1	y_1	z_1
t_2	x_2	y_2	z_2
$\vdots$	$\vdots$	$\vdots$	$\vdots$



Relative
[Local reference frame]



Displacement
 Velocity
 Acceleration