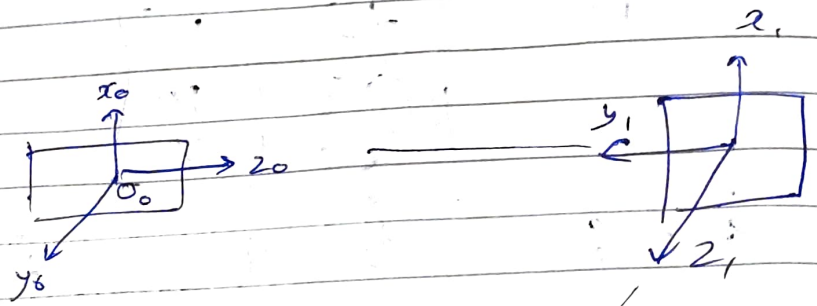
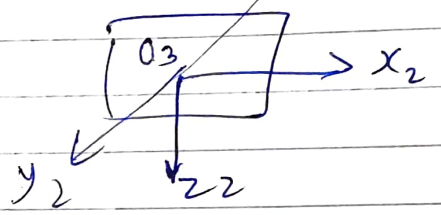
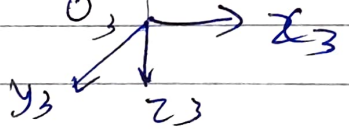
Assignment - 4

Q1.







$Q_3 = (x_1, y_1, z)$

Link	a_i	α_i	d_i	θ_i
1	0	-90	d_1	0
2	0	90	d_2	-90
3	0	0	d_3	0

① $d_1 = 5$ $d_2 = 3$ $d_3 = 4$

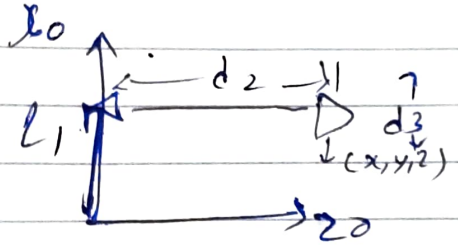
$$P = \begin{bmatrix} -4 \\ 3 \\ 5 \end{bmatrix}$$

$\dot{d_1} = 1 \qquad \dot{d_2} = 2 \qquad \dot{d_3} = 3$

$$\dot{V} = \begin{bmatrix} -3 \\ 2 \\ 1 \end{bmatrix}$$

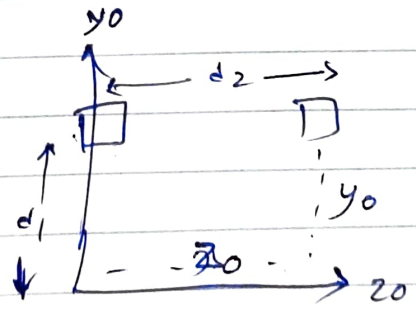
Q8 * For the inverse kinematic approach for 3-D prints

Side View



$$d_3 = L_1 - x_0$$

Top View



$$d_2 = z_0$$

$$d_1 = y_0$$