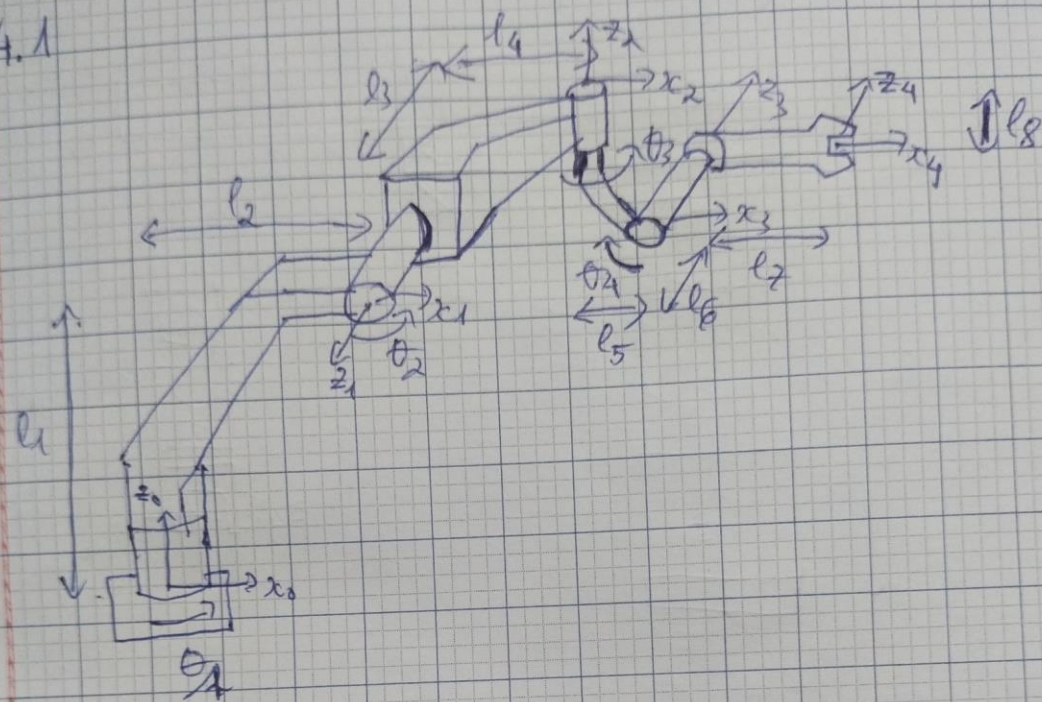
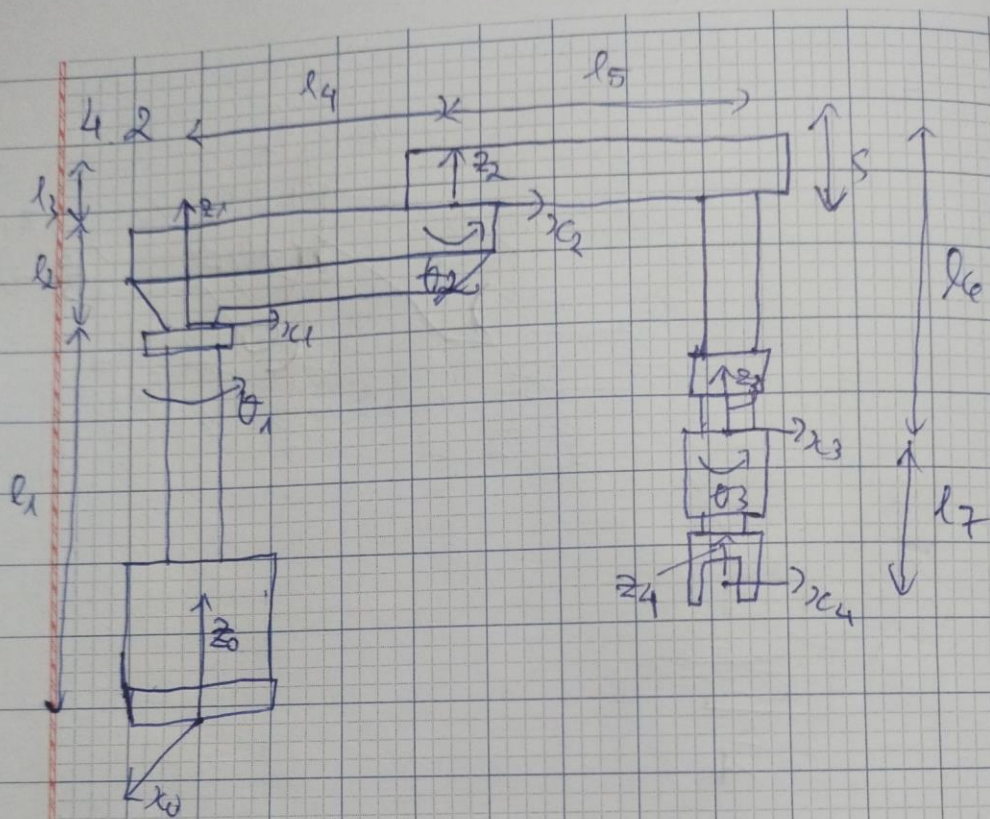


4.1

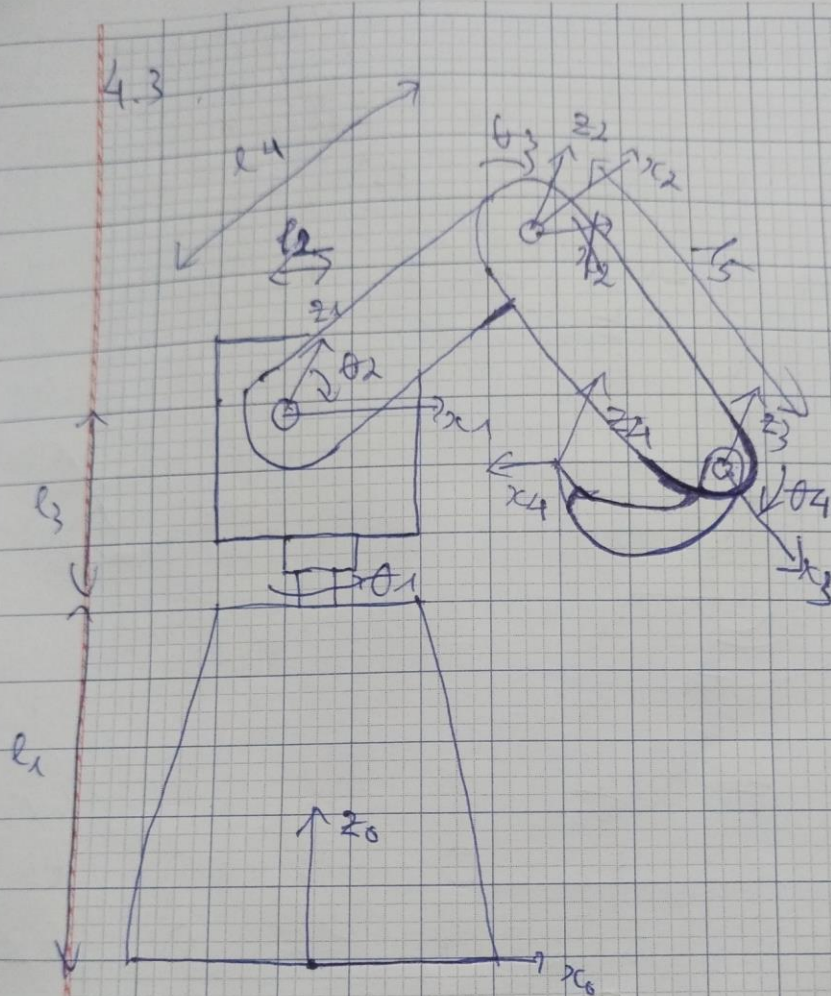


#	$\theta$	$l$	$\alpha$	$d$	var
1	$\theta_1$	$l_2$	$\pi/2$	$l_1$	$\theta_1$
2	$\theta_2$	$l_4$	$-\pi/2$	$l_3$	$\theta_2$
3	$\theta_3$	$l_5$	$-\pi/2$	$l_8$	$\theta_3$
4	$\theta_4$	$l_4$	$0$	$l_6$	$\theta_4$

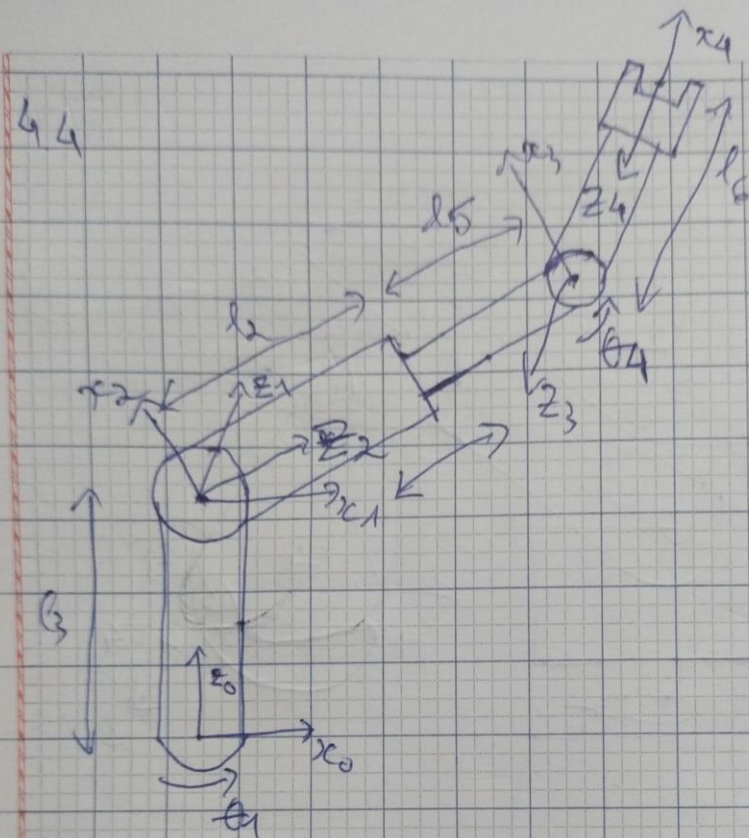


#	$\theta$	$l$	$\Delta$	$d$	var
1	$\theta_1$	$\bigcirc$	$\bigcirc$	$l_1$	$\theta_1$
2	$\theta_2$	$l_4$	$\bigcirc$	$l_2$	$\theta_2$
3	$\bigcirc$	$l_5$	$\overline{0}$	$l_4 + l_5 - l_3$	$s$
4	$\theta_3$	$\bigcirc$	$\bigcirc$	$l_7$	$\theta_3$





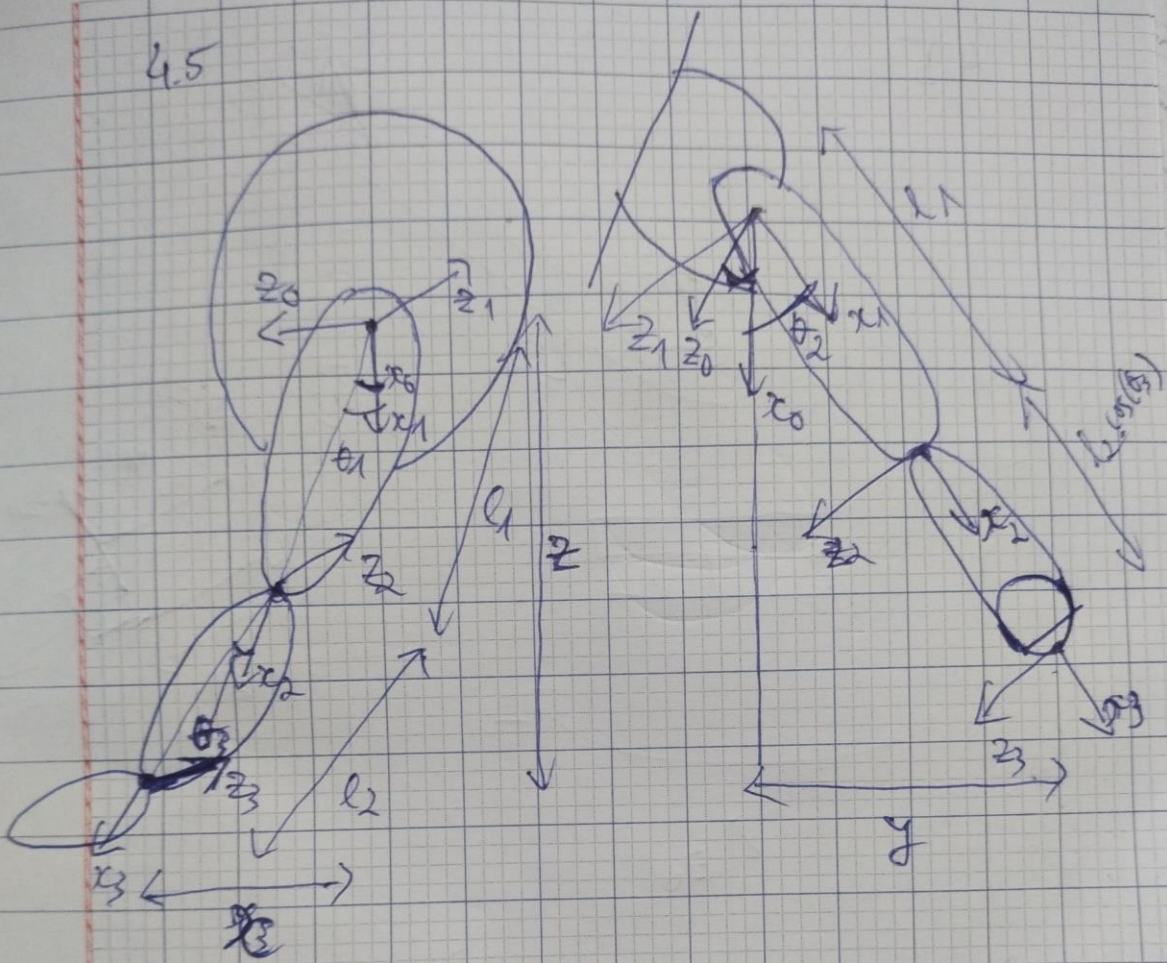
#	$\theta$	$l$	$\kappa$	<del>var</del>	var
1	$\theta_1$	$l_2$	$\pi/2$	$h, l_3$	$\theta_1$
2	$\theta_2$	$l_4$	0	0	$\theta_2$
3	$\theta_3$	$l_5$	0	0	$\theta_3$
4	$\theta_4$	$l_6$	0	0	$\theta_4$



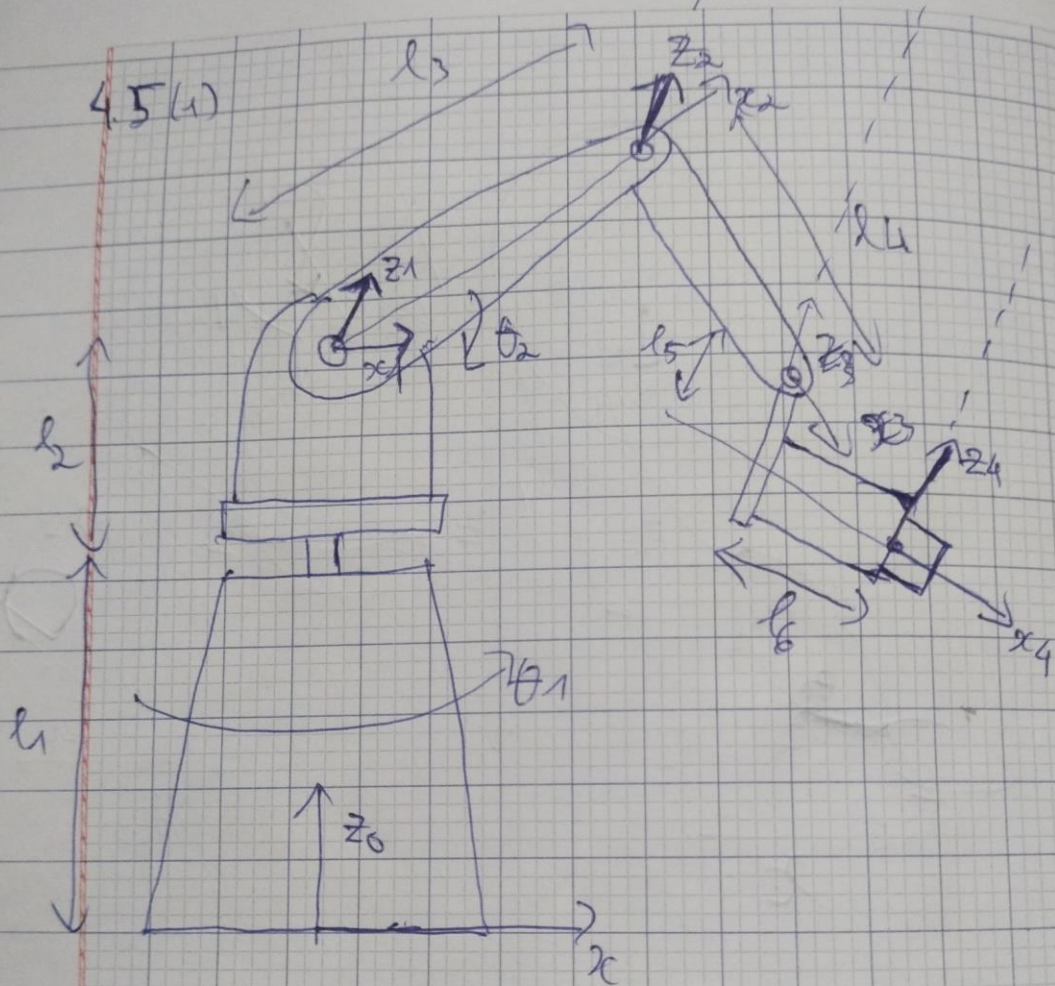
#	$\theta$	$l$	$\alpha$	$d$	var
1	$\theta_1$	0	$-\pi/2$	$l_3$	$\theta_1$
2	$\theta_2 + \pi/2$	0	$-\pi/2$	0	$\theta_2$
3	$\theta_3$	0	$-\pi/2$	$l_4 + l_5$	$l_5$
4	$\theta_4$	$l_6$	0	0	$\theta_4$



4.5

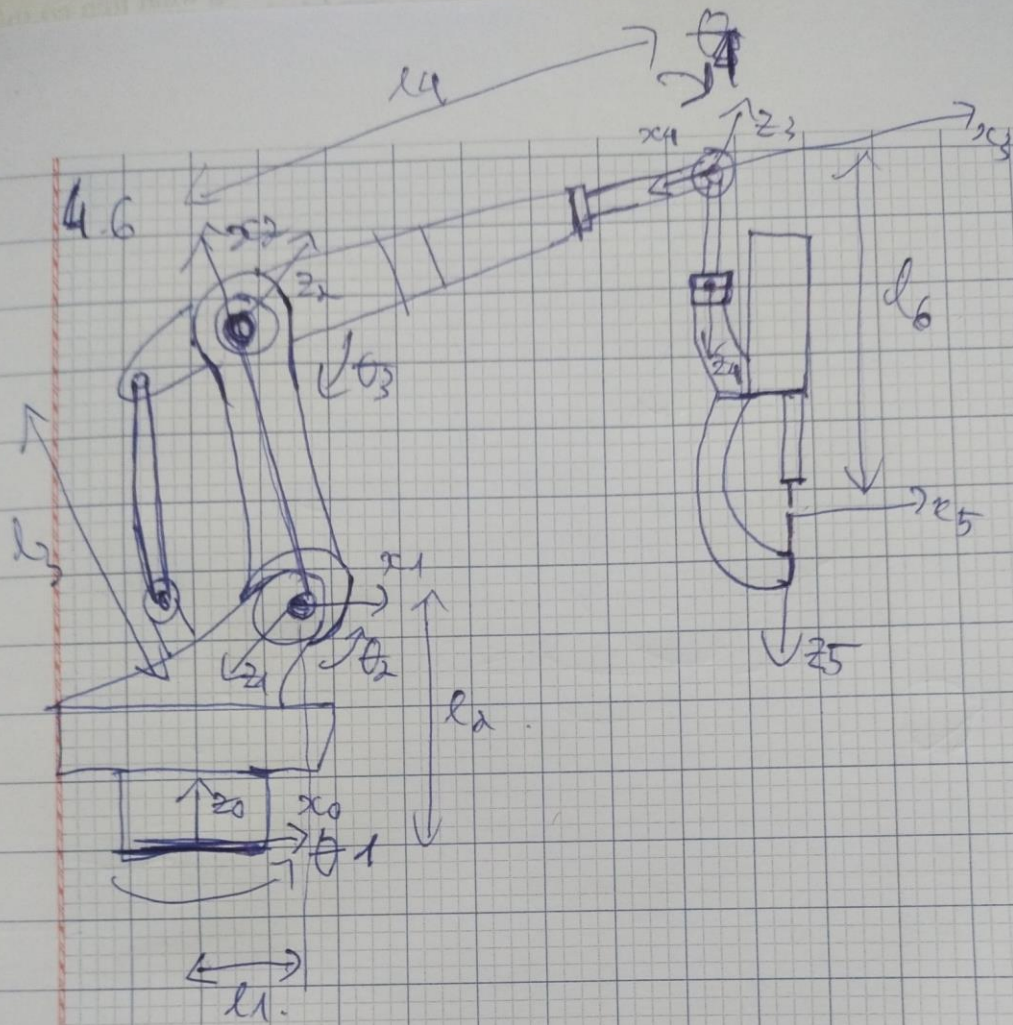


#	$\theta$	$l$	$\alpha$	$d$	var
1	$\theta_2$	0	$\pi/2$	0	$\theta_2$
2	$\theta_1$	$l_1$	0	0	$\theta_1$
3	$\theta_3$	$l_2$	0	0	$\theta_3$



#	$\theta$	$l$	$\alpha$	$d$	var
1	$\theta_1$	0	$-\pi/2$	$h+b$	$\theta_1$
2	$\theta_2$	$l_3$	0	0	$\theta_2$
3	$\theta_3$	$l_4$	0	0	$\theta_3$
4	$\theta_4$	$\sqrt{l_5^2 + l_6^2}$	0	0	$\theta_4$





#	$\theta$	$l$	$\alpha$	$d$	var
1	$\theta_1$	$l_1$	$\pi/2$	$l_2$	$\theta_1$
2	$\frac{\pi}{2} + \theta_2$	$l_3$	$\pi$	0	$\theta_2$
3	$\theta_3$	$l_4$	0	0	$\theta_3$
4	$\theta_4$	0	$-\pi/2$	0	$\theta_4$
5	$\theta_5$	$l_5$	0	$l_6$	$\theta_5$