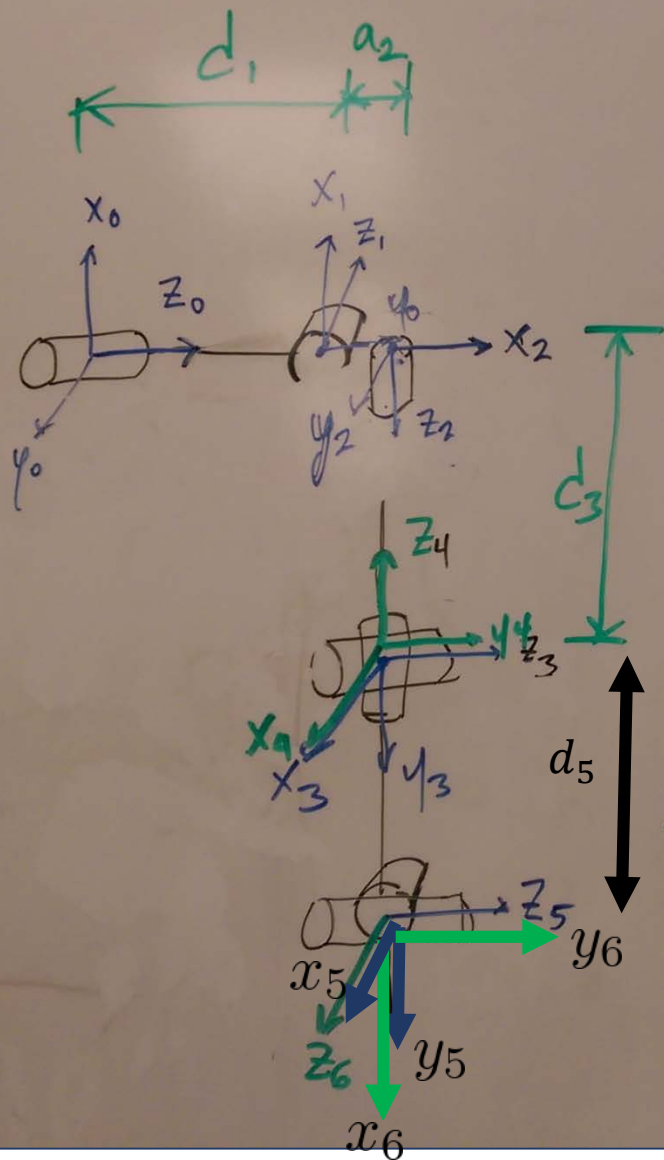


Updated Steps

this DOES NOT replace the process in the book, but rather are some practical steps that help me when doing DH parameter assignment

1. Put initial frames at each joint (or where you think they should go) with the z axis (axis of rotation or translation depending on joint type) along the joint axis
2. Decide if you will need to move in the z direction, x direction or both to get from one frame to the next
3. Add a constant offset for theta if needed to line the x-axis up properly
4. Make sure you can move along the z and x axes to get to the next frame's origin. If not, you may need to move the previous or next frame around.
5. Pick a rotation (alpha) about x that lines you up correctly with the already defined z of the next frame.
6. Iterate if necessary, then pick off the DH parameters.



	θ	d	a	α
1	θ_1	d_1	0	$\frac{\pi}{2}$
2	$\theta_2 + \frac{\pi}{2}$	0	a_2	$-\frac{\pi}{2}$
3	$\theta_3 + \frac{\pi}{2}$	d_3	0	$\frac{\pi}{2}$

theta	D	a	alpha
θ_4	0	0	$\frac{\pi}{2}$
θ_5	$-d_5$	0	$-\frac{\pi}{2}$
$\theta_6 + \frac{\pi}{2}$	0	0	$\frac{\pi}{2}$
θ_7	0	Distance to end effector	0