Q1 b.

1. M follows the rotation order indicated in “axis”. [a,b,c] defines the angles to rotate the axis for each of the three axes in the order indicated.
   Therefore $M = R_x(a)R_y(b)R_z(c)$
2. First we need to convert the point’s coordinates in B, to do this we apply M to p. Then we apply N to Mp(the point’s coordinates in B). Then we would need to convert the final coordinates back to A, which we can do by applying M inverse to NMp (the final coordinates in B)
   Therefore $N' = M^{-1}NM$
3. d is a direction unit vector and l is the length of the bone in the direction of d, therefore p = ld.
4. First we have to convert to the parent coordinate system and then to the global coordinate system. Let M be the matrix to convert from the parent bone to the current bone. We would use M^{-1} to convert from the current to the parent. Let x denote the coordinates of p on the global coordinate system.
   Therefore $x = M_0M^{-1}N'ld$

Link to part 2 video:
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