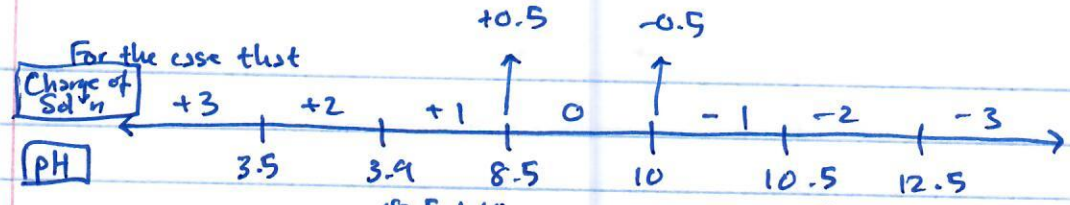
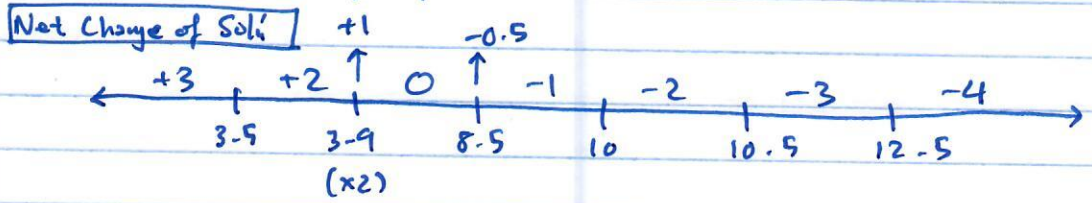


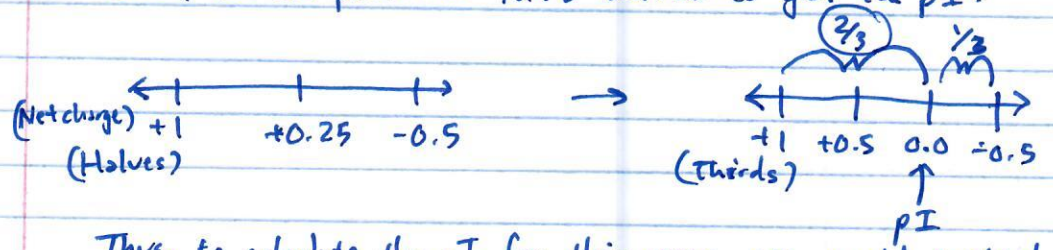
In this case, using $\left(\frac{8.5+10}{2}\right) = 9.25 = pI$ is fine, since the halfway point here **is** the pI.

However, in the case of repeating residues (such as a repeating aspartate):



Using $\left(\frac{8.5+3.9}{2}\right)$ would **not** work since the midpoint of the two pKas or pH values actually results in the point at which the solution has a net charge of +0.25 (since +1, +0.25, -0.5).

Instead, we want to partition between 8.5 and 3.9 such that we get the isoelectric point. Between +1 and -0.5, we can partition into thirds to get the pI:



Thus, to calculate the pI for this case, we would instead do:

$$\frac{2(8.5+3.9)}{3} = \boxed{8.267 = pI}$$

Understandably, this method may be a little more confusing, so make sure to understand how it works well.