## Students stuck on separating blocks and toothpicks - Original post by Mikkel Nannan on Nov. 15, 2011

I just finished the toothpick lesson with my second class and found that my lower students continually got stuck on separating the horizontal toothpicks from the vertical toothpicks. It seemed overwhelming for this group of students in both classes. Although I let the first class struggle until a peer was able to help, I chunked the toothpick chart for the afternoon class ... what this looked like was going to the chart in my computer and removing all of the vertical lines (went into borders n shading...) and then asked them one or two at a time how many toothpicks in each horizontal line, how can you find out how many toothpicks in ALL of the horizontal lines? Then I did the same for the vertical toothpicks. I think for grade nine, seeing this as two variables will be important so all of the students are struggling to turn their four variable formula into a two variable formula.

3b Toothpick Lines:								