Enough to make a variable Cijvqw where costs are from *i* to *j* for vehicle *v* and its maximum load *q* and maksimum travel distance *w*? My thought is that for each proposed solution I will have two variables q and w that is updated to the maximum load and distance for each vehicle and then those will determine in which part of the cost-matrix you are? Lets say Cijv looks like this:

|  |  |  |  |
| --- | --- | --- | --- |
|  | w<100tonn | w<200 tonn | w>200tonn |
| q<100 km | 100 | 200 | 350 |
| q<200 km | 200 | 250 | 450 |
| q>200 km | 300 | 350 | 550 |

Then given a max weight over the whole tour of 150 tonn and the total travel distance of 175 km we end up at the cost 250 (or a cost per km which then should be multiplied by distance).

Would this be an ok way to formulate this mathematically?