Pairwise contrasts comparison

This write-up compares two competing designs whereas the first design has higher residual degrees of freedom (DF) than the second design; however the first design has lower treatment average efficiency factor than the second design. To further dissect the properties of these two designs, the efficiency factors can be computed from all possible pairwise treatment contrasts.

If the design parameter consists of 3 treatments, then there are total of 3 comparisons, i.e. Treatment a versus Treatment b, Treatment a versus Treatment c and Treatment b versus Treatment c. The number of pairwise treatment comparison can be computed from

.

For the current example, the design parameter consists of ….