Covering Arrays

CSE 691 Homework # 4

Warning: Some of these are research questions, and a complete solution may be out of reach.

1. As we discussed in class, is it true that $CAN(t, k, v) \leq CAN(t, k-1, v+1) - 1$?
2. To try to answer (1), first consider the case when $t = 2$. Can we avoid the requirement for projection that some row covers only pairs that are not covered elsewhere?
3. Same problem... When $t \geq 3$, projection starts by partitioning the rows. Why does this not extend directly to strengths at least three?
4. Following on from (3), is there another way to determine which symbol to place in the new column, not requiring the partition used for $t = 2$?