

Disco II - Quiz 11

Name: _____

Box # _____

1. Rook Polynomials and forbidden positions

You are assigning 4 tasks T_1, T_2, T_3, T_4 to five colleagues C_1, C_2, C_3, C_4, C_5 . Colleague C_1 has screwed up T_4 in the past and C_4 had the same experience with T_2 . Colleague C_2 has threatened to quit if she has to do T_3 or T_4 again. You really, really need to keep C_2 .

1. Fill in all the forbidden positions in the following assignment chart.

	C_1	C_2	C_3	C_4	C_5
T_1					
T_2					
T_3					
T_4					

2. Compute the rook polynomial for the chessboard consisting of the forbidden positions
3. How many ways can you assign the tasks to your colleagues, following the constraints?