

9; 6 to 6; t to 2; e to 1:

5	4	0	9	7	2	8	1	3	6	t	e
				8							
				0							
				3							
				5							
				t							
				4							
				e							
				9							
				6							
				2							
				1							

Step 3: you transpose this row (17) across the matrix; since 18 will be a half-step higher than 17, I simply add 1 to each of the

numbers of I7:

5	4	0	9	7	2	8	1	3	6	t	e
				8		9					
				0		1					
				3		4					
				5		6					
				t		e					
				4		5					
				e		0					
				9		t					
				6		7					
				2		3					
				1		2					

Step 4: I keep adding one to each of the inversions starting with I9 which will be a half-step higher than I8:

5	4	0	9	7	2	8	1	3	6	t	e
			t	8		9					
			2	0		1					
			5	3		4					
			7	5		6					
			0	t		e					
			6	4		5					
			1	e		0					
			e	9		t					
			8	6		7					
			4	2		3					
			3	1		2					

Step 5: keep doing this across the matrix:

5	4	0	9	7	2	8	1	3	6	t	e
6	5	1	t	8	3	9	2	4	7	e	0
t	9	5	2	0	7	1	6	8	e	3	4
1	0	8	5	3	t	4	9	e	2	6	7
3	2	t	7	5	0	6	e	1	4	8	9
8	7	3	0	t	5	e	4	6	9	1	2
2	1	9	6	4	e	5	t	0	3	7	8
9	8	4	1	e	6	0	5	7	t	2	3
7	6	2	e	9	4	t	3	5	8	0	1
4	3	e	8	6	1	7	0	2	5	9	t
0	e	7	4	2	9	3	8	t	1	5	6
e	t	6	3	1	8	2	7	9	0	4	5

Step 6: make sure you've not made mistakes. Check each permutation and make sure you've not repeated a pc; if you have, there's a fatal flaw and you need to start over.

Check to make sure (this is not necessary if you've done the previous check, but it's reassuring to see this) that the same pc number moves from the upper-left-hand corner of the matrix to the lower right-hand corner. All correct matrices have this property. The fact that there's also the same pc number in this

matrix running from the lower left-hand corner to the upper right-hand corner is a unique property of this row and matrix.