

Assessment 7.A2 + + +

I understand how to derive the composition of permutations

7.H1 See Last Page

Assesment 7.F1 + + +

This was tedious, & I may have missed 2 thing or two. But I generally understand

$$7.F1 \quad R_0 = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 1 & 2 & 3 & 4 & 5 & 6 \end{pmatrix} \quad R_1 = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 2 & 3 & 4 & 5 & 6 & 1 \end{pmatrix} \quad R_2 = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 3 & 4 & 5 & 6 & 1 & 2 \end{pmatrix}$$

$$R_3 = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 4 & 5 & 6 & 1 & 2 & 3 \end{pmatrix} \quad R_4 = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 5 & 6 & 1 & 2 & 3 & 4 \end{pmatrix} \quad R_5 = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 6 & 1 & 2 & 3 & 4 & 5 \end{pmatrix}$$

$$R_6^{(a)} = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 6 & 4 & 3 & 2 & 1 & 6 \end{pmatrix} \quad R_7^{(b)} = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 6 & 5 & 4 & 3 & 2 & 1 \end{pmatrix} \quad R_8^{(c)} = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 1 & 6 & 5 & 4 & 3 & 2 \end{pmatrix}$$

$$R_9^{(d)} = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 2 & 1 & 6 & 5 & 4 & 3 \end{pmatrix} \quad R_{10}^{(e)} = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 3 & 2 & 1 & 6 & 5 & 4 \end{pmatrix} \quad R_{11}^{(f)} = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 4 & 3 & 2 & 1 & 6 & 5 \end{pmatrix}$$

o	R_0	R_1	R_2	R_3	R_4	R_5	R_6	R_7	R_8	R_9	R_{10}	R_{11}
R_0	R_0	R_1	R_2	R_3	R_4	R_5	R_6	R_7	R_8	R_9	R_{10}	R_{11}
R_1	R_1	R_2	R_3	R_4	R_5	R_0	R_7	R_8	R_9	R_{10}	R_{11}	R_6
R_2	R_2	R_3	R_4	R_5	R_0	R_1	R_8	R_9	R_{10}	R_{11}	R_6	R_7
R_3	R_3	R_4	R_5	R_0	R_1	R_2	R_9	R_{10}	R_{11}	R_6	R_7	R_8
R_4	R_4	R_5	R_0	R_1	R_2	R_3	R_{10}	R_{11}	R_6	R_7	R_8	R_9
R_5	R_5	R_0	R_1	R_2	R_3	R_4	R_{11}	R_6	R_7	R_8	R_9	R_{10}
R_6	R_6	R_{11}	R_{10}	R_9	R_8	R_7	R_0	R_5	R_4	R_3	R_2	R_1
R_7	R_7	R_6	R_{11}	R_{10}	R_9	R_8	R_1	R_0	R_5	R_4	R_3	R_2
R_8	R_8	R_7	R_6	R_{11}	R_{10}	R_9	R_2	R_1	R_0	R_5	R_4	R_3
R_9	R_9	R_8	R_7	R_6	R_{11}	R_{10}	R_3	R_2	R_1	R_0	R_5	R_4
R_{10}	R_{10}	R_9	R_8	R_7	R_6	R_{11}	R_4	R_3	R_2	R_1	R_0	R_5
R_{11}	R_{11}	R_{10}	R_9	R_8	R_7	R_6	R_5	R_4	R_3	R_2	R_1	R_0