

$$\times \quad \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \quad \begin{pmatrix} -1 & 0 \\ 0 & -1 \end{pmatrix} \quad \begin{pmatrix} i & 0 \\ 0 & -i \end{pmatrix} \quad \begin{pmatrix} -i & 0 \\ 0 & i \end{pmatrix} \quad \begin{pmatrix} 0 & 1 \\ -1 & 0 \end{pmatrix} \quad \begin{pmatrix} 0 & -1 \\ 1 & 0 \end{pmatrix} \quad \begin{pmatrix} 0 & i \\ i & 0 \end{pmatrix} \quad \begin{pmatrix} 0 & -i \\ -i & 0 \end{pmatrix}$$

0	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	(2,3,4)	(1,4,3)	(1,3,2)	(1,2,4)	(2,4,3)	(1,2,3)	(1,4,2)	(1,3,4)	(3,4)	(1,4,2,3)	(1,2)	(1,3,2,4)	(2,4)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,4)	
(1,3)(2,4)	)	(1,4)(2,3)	(1,2)(3,4)	(1,4,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,2,3)	(2,4,3)	(1,3,4)	(1,4,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,2)	(1,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,2,4,3)	(2,3)	(1,4)	(1,3,4,2)
(1,2)(3,4)	(1,4)(2,3)	)	(1,3)(2,4)	(1,3,2)	(1,2,4)	(2,3,4)	(1,4,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,4,2,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)	(1,3,4,2)	(1,4)	(2,3)	(1,2,4,3)
(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	)	(1,2,4)	(1,3,2)	(1,4,3)	(2,3,4)	(1,3,4)	(1,4,2)	(1,2,3)	(2,4,3)	(1,3,2,4)	(1,2)	(1,4,2,3)	(3,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	(2,4)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,3)
(2,3,4)	(1,3,2)	(1,2,4)	(1,4,3)	(2,4,3)	(1,4,2)	(1,3,4)	(1,2,3)	)	(1,2)(3,4)	(1,4)(2,3)	(1,3)(2,4)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,3)	(2,3)	(1,3,4,2)	(1,4)	(1,2,4,3)	(3,4)	(1,2)	(1,3,2,4)	(1,4,2,3)
(1,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,2,3)	(1,3,4)	(1,4,2)	(2,4,3)	(1,3)(2,4)	(1,4)(2,3)	(1,2)(3,4)	)	(1,3)	(1,2,3,4)	(1,4,3,2)	(2,4)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3)	(1,4,2,3)	(1,3,2,4)	(1,2)	(3,4)
(1,3,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,4,2)	(2,4,3)	(1,2,3)	(1,3,4)	(1,2,3,4)	)	(1,3)(2,4)	(1,4)(2,3)	(1,4,3,2)	(2,4)	(1,3)	(1,2,3,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,4)	(1,2)	(3,4)	(1,4,2,3)	(1,3,2,4)
(1,2,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,3,4)	(1,2,3)	(2,4,3)	(1,4,2)	(1,4)(2,3)	(1,3)(2,4)	)	(1,2)(3,4)	(1,2,3,4)	(1,3)	(2,4)	(1,4,3,2)	(1,4)	(1,2,4,3)	(2,3)	(1,3,4,2)	(1,4,2,3)	(3,4)	(1,2)	
(2,4,3)	(1,3,4)	(1,2,3)	(1,4,2)	)	(1,4)(2,3)	(1,3)(2,4)	(1,2)(3,4)	(2,3,4)	(1,2,4)	(1,4,3)	(1,3,2)	(2,3)	(1,4)	(1,2,4,3)	(1,3,4,2)	(3,4)	(1,3,2,4)	(1,4,2,3)	(1,2)	(2,4)	(1,2,3,4)	(1,3)	(1,4,3,2)
(1,2,3)	(1,4,2)	(2,4,3)	(1,3,4)	(1,3)(2,4)	(1,2)(3,4)	)	(1,4)(2,3)	(1,4,3)	(1,3,2)	(2,3,4)	(1,2,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,4)	(1,4,2,3)	(1,2)	(3,4)	(1,3,2,4)	(1,3)	(1,4,3,2)	(2,4)	(1,2,3,4)
(1,4,2)	(1,2,3)	(1,3,4)	(2,4,3)	(1,2)(3,4)	(1,3)(2,4)	(1,4)(2,3)	(1,3,2)	(1,4,3)	(1,2,4)	(2,3,4)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,3)	(1,2)	(1,4,2,3)	(1,3,2,4)	(3,4)	(1,4,3,2)	(1,2,3,4)	(1,3)	(2,4)		
(1,3,4)	(2,4,3)	(1,4,2)	(1,2,3)	(1,4)(2,3)	)	(1,2)(3,4)	(1,3)(2,4)	(1,2,4)	(2,3,4)	(1,3,2)	(1,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,2,4,3)	(3,4)	(1,2)	(1,4,2,3)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,3)	
(3,4)	(1,3,2,4)	(1,2)	(1,4,2,3)	(2,3)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	)	(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	(2,4,3)	(1,3,4)	(1,4,2)	(1,2,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,4,3)
(1,4,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,2,4,3)	(1,3,4,2)	(1,4)	(2,3)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	)	(1,2,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,4,3)	(1,3,2)	(1,2,4)	(2,3,4)
(1,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,3,4,2)	(1,2,4,3)	(2,3)	(1,4)	(1,4,3,2)	(1,3)	(2,4)	(1,2,3,4)	(1,2)(3,4)	(1,3)(2,4)	)	(1,4)(2,3)	(1,4,2,3)	(1,4,2)	(1,2,3)	(2,4,3)	(1,3,4)	(1,3,2)	(1,4,3)	(1,2,4)
(1,3,2,4)	(3,4)	(1,4,2,3)	(1,2)	(1,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,2,3,4)	(2,4)	(1,3)	(1,4,3,2)	(1,4)(2,3)	)	(1,3)(2,4)	(1,2)(3,4)	(1,3,4)	(2,4,3)	(1,2,3)	(1,4,2)	(1,2,4)	(2,3,4)	(1,4,3,2)	(1,3,2)
(2,4)	(1,3)	(1,2,3,4)	(1,4,3,2)	(3,4)	(1,4,2,3)	(1,3,2,4)	(1,2)	(2,3)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,3,2)	)	(1,3)(2,4)	(1,4,2,3)	(1,2)(3,4)	(2,4,3)	(1,2,3)	(1,3,4)	(1,4,2)
(1,3)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,4,2,3)	(3,4)	(1,2)	(1,3,2,4)	(1,4)	(1,2,4,3)	(2,3)	(1,3,4,2)	(1,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,2,4)	(1,3,2,4))	(1,2)(3,4)	(1,4,2,3)	(1,2,3)	(2,4,3)	(1,4,2)	(1,3,4)
(1,4,3,2)	(1,2,3,4)	(1,3)	(2,4)	(1,2)	(1,3,2,4)	(1,4,2,3)	(3,4)	(1,3,4,2)	(1,4,2,3)	(1,4)	(1,2,4,3)	(2,3)	(1,3,2)	(1,2,4)	(1,4,3)	(2,3,4)	(1,2,3,4)	(1,4,2,3)	(1,3,2,4)	(1,4,2,3)	(1,2,3)	(2,4,3)		
(1,2,3,4)	(1,4,3,2)	(2,4)	(1,3)	(1,3,2,4)	(1,2)	(3,4)	(1,4,2,3)	(1,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,4,3)	(1,4)(2,3)	(1,2)(3,4)	)	(1,3)(2,4)	(1,3,4)	(1,4,2)	(2,4,3)	(1,2,3)
(2,3)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,4)	(1,4,3,2)	(1,3)	(1,2,3,4)	(1,2)	(3,4)	(1,4,2,3)	(1,3,2,4)	(2,4,3)	(1,4,2)	(1,4,2,3)	(1,2,3)	(1,3,4)	(2,3,4)	(1,3,2)	(1,2,4,3)	(1,2)(3,4)	(1,3)(2,4)	(1,4)(2,3)		
(1,2,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,3)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,4,2,3)	(1,3,2,4)	(3,4)	(1,2)	(1,4,2,3)	(1,2,3,4)	(1,3,4)	(1,4,2)	(1,4,2,3)	(1,2,4,3)	(1,3,2,4)	(1,4,2,3)	(1,2,3,4)	(2,4,3)	(1,2)(3,4)	(1,3)(2,4)	
(1,3,4,2)	(2,3)	(1,4)	(1,2,4,3)	(1,4,3,2)	(2,4)	(1,2,3,4)	(1,3)	(1,2)	(3,4)	(1,3,2,4)	(1,4,2,3)	(1,3,2,4)	(2,4,3)	(1,4,2)	(1,4,2,3)	(1,2,3)	(1,3,4)	(1,3,2)	(2,3,4)	(1,2,4,3)	(1,3,2,4)	(1,4,2,3)	(1,3,2,4)	
(1,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,2,3,4)	(1,3)	(1,4,3,2)	(2,4)	(1,4,2,3)	(1,3,2,4)	(1,2)	(3,4)	(1,4,2,3)	(1,2,3,4)	(1,2,3)	(1,4,2)	(1,4,2,3)	(1,2,4,3)	(1,3,2,4)	(1,4,2,3)	(1,2,3,4)	(2,4,3)	(1,2)(3,4)	(1,3)(2,4)	

0	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	(2,3,4)	(1,4,3)	(1,3,2)	(1,2,4)	(2,4,3)	(1,2,3)	(1,4,2)	(1,3,4)	(3,4)	(1,4,2,3)	(1,2)	(1,3,2,4)	(2,4)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,4)	
(1,3)(2,4)	()	(1,4)(2,3)	(1,2)(3,4)	(1,4,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,2,3)	(2,4,3)	(1,3,4)	(1,4,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,2)	(1,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,2,4,3)	(2,3)	(1,4)	(1,3,4,2)	
(1,2)(3,4)	(1,4)(2,3)	()	(1,3)(2,4)	(1,3,2)	(1,2,4)	(2,3,4)	(1,4,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,4,2,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)	(1,3,4,2)	(1,4)	(2,3)	(1,2,4,3)	
(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	()	(1,2,4)	(1,3,2)	(1,4,3)	(2,3,4)	(1,3,4)	(1,4,2)	(1,2,3)	(2,4,3)	(1,3,2,4)	(1,2)	(1,4,2,3)	(3,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	(2,4)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,3)	
(2,3,4)	(1,3,2)	(1,2,4)	(1,4,3)	(2,4,3)	(1,4,2)	(1,3,4)	(1,2,3)	()	(1,2)(3,4)	(1,4)(2,3)	(1,5)(2,4)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,3)	(2,3)	(1,3,4,2)	(1,4)	(1,2,4,3)	(3,4)	(1,2)	(1,3,2,4)	(1,4,2,3)	
(1,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,2,3)	(1,3,4)	(1,4,2)	(2,4,3)	(1,3)(2,4)	(1,4)(2,3)	(1,2)(3,4)	()	(1,3)	(1,2,3,4)	(1,4,3,2)	(2,4)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3)	(1,4,2,3)	(1,3,2,4)	(1,2)	(3,4)	
(1,3,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,4,2)	(2,4,3)	(1,2,3)	(1,3,4)	(1,2,3,4)	()	(1,3)(2,4)	(1,4)(2,3)	(1,4,3,2)	(2,4)	(1,3)	(1,2,3,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,4)	(1,2)	(3,4)	(1,4,2,3)	(1,3,2,4)	
(1,2,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,3,4)	(1,2,3)	(2,4,3)	(1,4,2)	(1,4)(2,3)	(1,3)(2,4)	()	(1,2)(3,4)	(1,2,3,4)	(1,3)	(2,4)	(1,4,3,2)	(1,4)	(1,2,4,3)	(2,3)	(1,3,4,2)	(1,3,2,4)	(1,4,2,3)	(3,4)	(1,2)	
(2,4,3)	(1,3,4)	(1,2,3)	(1,4,2)	()	(1,4)(2,3)	(1,3)(2,4)	(1,2)(3,4)	(2,3,4)	(1,2,4)	(1,4,3)	(1,3,2)	(2,3)	(1,4)	(1,2,4,3)	(1,3,4,2)	(3,4)	(1,3,2,4)	(1,4,2,3)	(1,2)	(2,4)	(1,2,3,4)	(1,3)	(1,4,3,2)	
(1,2,3)	(1,4,2)	(2,4,3)	(1,3,4)	(1,3)(2,4)	(1,2)(3,4)	()	(1,4)(2,3)	(1,4,3)	(1,3,2)	(2,3,4)	(1,2,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,4)	(1,4,2,3)	(1,2)	(3,4)	(1,3,2,4)	(1,3)	(1,4,3,2)	(2,4)	(1,2,3,4)	
(1,4,2)	(1,2,3)	(1,3,4)	(2,4,3)	(1,2)(3,4)	(1,3)(2,4)	(1,4)(2,3)	()	(1,3,2)	(1,4,3)	(1,2,4)	(2,3,4)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,3)	(1,2)	(1,4,2,3)	(1,3,2,4)	(3,4)	(1,4,3,2)	(1,2,3,4)	(1,3)	(2,4)	
(1,3,4)	(2,4,3)	(1,4,2)	(1,2,3)	(1,4)(2,3)	()	(1,2)(3,4)	(1,3)(2,4)	(1,2,4)	(2,3,4)	(1,3,2)	(1,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,2,4,3)	(3,4)	(1,2)	(1,4,2,3)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,3)		
(3,4)	(1,3,2,4)	(1,2)	(1,4,2,3)	(2,3)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	()	(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	(2,4,3)	(1,3,4)	(1,4,2)	(1,2,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,4,3)	
(1,4,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,2,4,3)	(1,3,4,2)	(1,4)	(2,3)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	()	(1,2,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,4,3)	(1,3,2)	(1,2,4)	(2,3,4)	
(1,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,3,4,2)	(1,2,4,3)	(2,3)	(1,4)	(1,4,3,2)	(1,3)	(2,4)	(1,2,3,4)	(1,2)(3,4)	(1,3)(2,4)	()	(1,4)(2,3)	(1,4,2,3)	(1,4)	(2,3)	(1,2,4,3)	(1,3,4)	(1,3,2)	(1,4,3)	(1,2,4)	
(1,3,2,4)	(3,4)	(1,4,2,3)	(1,2)	(1,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,2,3,4)	(2,4)	(1,3)	(1,4,3,2)	(1,4)(2,3)	()	(1,3)(2,4)	(1,2)(3,4)	(1,3,4)	(2,4,3)	(1,2,3)	(1,4,2)	(1,2,4)	(2,3,4)	(1,4,3)	(1,3,2)	
(2,4)	(1,3)	(1,2,3,4)	(1,4,3,2)	(3,4)	(1,4,2,3)	(1,3,2,4)	(1,2)	(2,3)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,3,2)	()	(1,3)(2,4)	(1,4,2,3)	(1,2)(3,4)	(2,4,3)	(1,2,3)	(1,3,4)	(1,4,2)	
(1,3)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,4,2,3)	(3,4)	(1,2)	(1,3,2,4)	(1,4)	(1,2,4,3)	(2,3)	(1,3,4,2)	(1,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,2,4)	(1,3)	(1,3)(2,4)	()	(1,2)(3,4)	(1,4,2,3)	(1,2,3)	(1,4,2)	(1,3,4)
(1,4,3,2)	(1,2,3,4)	(1,3)	(2,4)	(1,2)	(1,3,2,4)	(1,4,2,3)	(3,4)	(1,3,4,2)	(1,4,3,2)	(1,4)	(1,2,4,3)	(2,3)	(1,2,4)	(1,3,2)	(1,4,3)	(2,3,4)	(1,2)	(1,2)(3,4)	(1,4,2,3)	(1,3,2,4)	(1,4)	(1,2,3)	(2,4,3)	
(1,2,3,4)	(1,4,3,2)	(2,4)	(1,3)	(1,3,2,4)	(1,2)	(3,4)	(1,4,2,3)	(1,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,4,3)	(1,4)(2,3)	(1,2)	(1,3)	(1,2)(3,4)	(1,4,2,3)	(1,2,3)	(1,4,2)	(2,4,3)	(1,2,3)
(2,3)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,4)	(1,4,3,2)	(1,3)	(1,2,3,4)	(3,4)	(1,2)	(1,4,2,3)	(1,3,2,4)	(1,4,2)	(2,4,3)	(1,4,2)	(1,2,3)	(1,3,4)	(2,3,4)	(1,3,2)	(1,2)	(1,2)(3,4)	(1,3,2,4)	(1,4)	(1,2,3,4)	(1,4)(2,3)
(1,2,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,3,4,2)	(1,2,4,3)	(1,3)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,4,2,3)	(1,2)	(1,3,2,4)	(1,2,3)	(1,3,4)	(2,4,3)	(1,4,2)	(1,4,3)	(1,2,4,3)	(1,3,2,4)	(1,4)	(1,2,3,4)	(1,4)(2,3)	(1,2,3,4)	
(1,3,4,2)	(2,3)	(1,4)	(1,2,4,3)	(1,2,4,3)	(2,4)	(1,2,3,4)	(1,3)	(1,2,3,4)	(3,4)	(1,2)	(1,3,2,4)	(1,4,2,3)	(1,4,2)	(2,4,3)	(1,3,4)	(1,2,3)	(1,3,2)	(2,3,4)	(1,2,4,3)	(1,3,2,4)	(1,4)	(1,2,3,4)	(1,3,2,4)	
(1,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,2,3,4)	(1,3)	(1,4,3,2)	(2,4)	(1,3,2,4)	(1,4,2,3)	(1,2)	(3,4)	(1,3,4)	(1,2,3,4)	(1,2,3)	(1,4,2)	(2,4,3)	(1,2,4,3)	(1,3,2,4)	(1,4)	(1,2,3,4)	(1,3,2,4)	(1)		

0	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	(2,3,4)	(1,4,3)	(1,3,2)	(1,2,4)	(2,4,3)	(1,2,3)	(1,4,2)	(1,3,4)	(3,4)	(1,4,2,3)	(1,2)	(1,3,2,4)	(2,4)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,4)	
(1,3)(2,4)	()	(1,4)(2,3)	(1,2)(3,4)	(1,4,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,2,3)	(2,4,3)	(1,3,4)	(1,4,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,2)	(1,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,2,4,3)	(2,3)	(1,4)	(1,3,4,2)	
(1,2)(3,4)	(1,4)(2,3)	()	(1,3)(2,4)	(1,3,2)	(1,2,4)	(2,3,4)	(1,4,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,4,2,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)	(1,3,4,2)	(1,4)	(2,3)	(1,2,4,3)	
(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	()	(1,2,4)	(1,3,2)	(1,4,3)	(2,3,4)	(1,3,4)	(1,4,2)	(1,2,3)	(2,4,3)	(1,3,2,4)	(1,2)	(1,4,2,3)	(3,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	(2,4)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,3)	
(2,3,4)	(1,3,2)	(1,2,4)	(1,4,3)	(2,4,3)	(1,4,2)	(1,3,4)	(1,2,3)	()	(1,2)(3,4)	(1,4)(2,3)	(1,5)(2,4)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,3)	(2,3)	(1,3,4,2)	(1,4)	(1,2,4,3)	(3,4)	(1,2)	(1,3,2,4)	(1,4,2,3)	
(1,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,2,3)	(1,3,4)	(1,4,2)	(2,4,3)	(1,3)(2,4)	(1,4)(2,3)	(1,2)(3,4)	()	(1,3)	(1,2,3,4)	(1,4,3,2)	(2,4)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3)	(1,4,2,3)	(1,3,2,4)	(1,2)	(3,4)	
(1,3,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,4,2)	(2,4,3)	(1,2,3)	(1,3,4)	(1,2)(3,4)	()	(1,3)(2,4)	(1,4)(2,3)	(1,4,3,2)	(2,4)	(1,3)	(1,2,3,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,4)	(1,2)	(3,4)	(1,4,2,3)	(1,3,2,4)	
(1,2,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,3,4)	(1,2,3)	(2,4,3)	(1,4,2)	(1,4)(2,3)	(1,3)(2,4)	()	(1,2)(3,4)	(1,3,2,4)	(1,3)	(2,4)	(1,4,3,2)	(1,4)	(1,2,4,3)	(2,3)	(1,3,4,2)	(1,4,2,3)	(3,4)	(1,2)		
(2,4,3)	(1,3,4)	(1,2,3)	(1,4,2)	()	(1,4)(2,3)	(1,3)(2,4)	(1,2)(3,4)	(2,3,4)	(1,2,4)	(1,4,3)	(1,3,2)	(2,3)	(1,4)	(1,2,4,3)	(1,3,4,2)	(3,4)	(1,3,2,4)	(1,4,2,3)	(1,2)	(2,4)	(1,2,3,4)	(1,3)	(1,4,3,2)	
(1,2,3)	(1,4,2)	(2,4,3)	(1,3,4)	(1,3)(2,4)	(1,2)(3,4)	()	(1,4)(2,3)	(1,4,3)	(1,3,2)	(2,3,4)	(1,2,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,4)	(1,4,2,3)	(1,2)	(3,4)	(1,3,2,4)	(1,3)	(1,4,3,2)	(2,4)	(1,2,3,4)	
(1,4,2)	(1,2,3)	(1,3,4)	(2,4,3)	(1,2)(3,4)	(1,3)(2,4)	(1,4)(2,3)	()	(1,3,2)	(1,4,3)	(1,2,4)	(2,3,4)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,3)	(1,2)	(1,4,2,3)	(1,3,2,4)	(3,4)	(1,4,3,2)	(1,2,3,4)	(2,4)		
(1,3,4)	(2,4,3)	(1,4,2)	(1,2,3)	(1,4)(2,3)	()	(1,2)(3,4)	(1,3)(2,4)	(1,2,4)	(2,3,4)	(1,3,2)	(1,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,2,4,3)	(3,4)	(1,3,2,4)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,3)			
(3,4)	(1,3,2,4)	(1,2)	(1,4,2,3)	(2,3)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	()	(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	(2,4,3)	(1,3,4)	(1,4,2)	(1,2,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,4,3)	
(1,4,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,2,4,3)	(1,3,4,2)	(1,4)	(2,3)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	()	(1,2,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,4,3)	(1,3,2)	(1,2,4)	(2,3,4)	
(1,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,3,4,2)	(1,2,4,3)	(2,3)	(1,4)	(1,4,3,2)	(1,3)	(2,4)	(1,2,3,4)	(1,2)(3,4)	(1,3)(2,4)	()	(1,4)(2,3)	(1,4,2)	(1,2,3)	(2,4,3)	(1,3,4)	(1,3,2)	(1,4,3)	(2,3,4)	(1,2,4)	
(1,3,2,4)	(3,4)	(1,4,2,3)	(1,2)	(1,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,2,3,4)	(2,4)	(1,3)	(1,4,3,2)	(1,4)(2,3)	()	(1,3)(2,4)	(1,2)(3,4)	(1,3,4)	(2,4,3)	(1,2,3)	(1,4,2)	(1,2,4)	(2,3,4)	(1,4,3,2)	(1,3,2)	
(2,4)	(1,3)	(1,2,3,4)	(1,4,3,2)	(3,4)	(1,4,2,3)	(1,3,2,4)	(1,2)	(2,3)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,3,2)	()	(1,3)(2,4)	(1,4,2,3)	(1,2)(3,4)	(2,4,3)	(1,2,3)	(1,3,4)	(1,4,2)	
(1,3)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,4,2,3)	(3,4)	(1,2)	(1,3,2,4)	(1,4)	(1,2,4,3)	(2,3)	(1,3,4,2)	(1,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,2,4)	(1,3)	(1,3)(2,4)	()	(1,2)(3,4)	(1,4,2,3)	(1,2,3)	(1,4,2)	(1,3,4)
(1,4,3,2)	(1,2,3,4)	(1,3)	(2,4)	(1,2)	(1,3,2,4)	(1,4,2,3)	(3,4)	(1,3,4,2)	(1,4)	(1,2,4,3)	(2,3)	(1,3,2)	(1,2,4)	(1,4,3)	(2,3,4)	(1,2,4)	(1,2)(3,4)	(1,4,2,3)	(1,3)(2,4)	(1,4)	(1,2,3)	(2,4,3)		
(1,2,3,4)	(1,4,3,2)	(2,4)	(1,3)	(1,3,2,4)	(1,2)	(3,4)	(1,4,2,3)	(1,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,4,3)	(1,4)(2,3)	(1,2)(3,4)	()	(1,3)(2,4)	(1,3,4)	(1,4,2)	(2,4,3)	(1,2,3)	
(2,3)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,4)	(1,4,3,2)	(1,3)	(1,2,3,4)	(3,4)	(1,2)	(1,4,2,3)	(1,3,2,4)	(2,4,3)	(1,4,2)	(1,2,3)	(1,3,4)	(2,3,4)	(1,3,2)	(1,3,2)	(1,4,3,2)	(1,2)(3,4)	(1,3)(2,4)	(1,4)(2,3)		
(1,2,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,3)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,4,2,3)	(1,3,2,4)	(3,4)	(1,2)	(1,4,2,3)	(1,2,3,4)	(1,3,4)	(1,2,3)	(1,4,3)	(1,2,4)	(1,3,2)	(1,4,2,3)	(1,4)	(1,2)(3,4)	(1,3)(2,4)	(1,2)(3,4)	
(1,3,4,2)	(2,3)	(1,4)	(1,2,3,4)	(1,4,3,2)	(2,4)	(1,2,3,4)	(1,3)	(1,2,3,4)	(3,4)	(1,3,2,4)	(1,4,2,3)	(1,4,2)	(1,2,3,4)	(2,4,3)	(1,3,4)	(1,2,3)	(1,3,2)	(2,3,4)	(1,2,4)	(1,4,3,2)	(1)	(1,4)(2,3)	(1,3)(2,4)	
(1,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,2,3,4)	(1,3)	(1,4,3,2)	(2,4)	(1,2,3,4)	(1,3,2,4)	(1,2,4,3)	(3,4)	(1,2)	(1,4,2,3)	(1,2,3,4)	(1,3,4)	(1,2,3)	(1,3,2)	(2,3,4)	(1,2,4)	(1,4,3,2)	(1)	(1,2)(3,4)	(1,3)(2,4)	

0	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	(2,3,4)	(1,4,3)	(1,3,2)	(1,2,4)	(2,4,3)	(1,2,3)	(1,4,2)	(1,3,4)	(3,4)	(1,4,2,3)	(1,2)	(1,3,2,4)	(2,4)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,4)	
(1,3)(2,4)	()	(1,4)(2,3)	(1,2)(3,4)	(1,4,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,2,3)	(2,4,3)	(1,3,4)	(1,4,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,2)	(1,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,2,4,3)	(2,3)	(1,4)	(1,3,4,2)	
(1,2)(3,4)	(1,4)(2,3)	()	(1,3)(2,4)	(1,3,2)	(1,2,4)	(2,3,4)	(1,4,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,4,2,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)	(1,3,4,2)	(1,4)	(2,3)	(1,2,4,3)	
(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	()	(1,2,4)	(1,3,2)	(1,4,3)	(2,3,4)	(1,3,4)	(1,4,2)	(1,2,3)	(2,4,3)	(1,3,2,4)	(1,2)	(1,4,2,3)	(3,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	(2,4)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,3)	
(2,3,4)	(1,3,2)	(1,2,4)	(1,4,3)	(2,4,3)	(1,4,2)	(1,3,4)	(1,2,3)	()	(1,2)(3,4)	(1,4)(2,3)	(1,2)(3,4)	(1,5)(2,4)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,3)	(2,3)	(1,3,4,2)	(1,4)	(1,2,4,3)	(3,4)	(1,2)	(1,3,2,4)	(1,4,2,3)
(1,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,2,3)	(1,3,4)	(1,4,2)	(2,4,3)	(1,3)(2,4)	(1,4)(2,3)	(1,2)(3,4)	()	(1,3)	(1,2,3,4)	(1,4,3,2)	(2,4)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3)	(1,4,2,3)	(1,3,2,4)	(1,2)	(3,4)	
(1,3,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,4,2)	(2,4,3)	(1,2,3)	(1,3,4)	(1,2)(3,4)	()	(1,3)(2,4)	(1,4)(2,3)	(1,4,3,2)	(2,4)	(1,3)	(1,2,3,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,4)	(1,2,3,4)	(1,4,2,3)	(1,3,2,4)		
(1,2,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,3,4)	(1,2,3)	(2,4,3)	(1,4,2)	(1,4)(2,3)	(1,3)(2,4)	()	(1,2)(3,4)	(1,2,3,4)	(1,3)	(2,4)	(1,4,3,2)	(1,4)	(1,2,4,3)	(2,3)	(1,3,4,2)	(1,3,2,4)	(1,4,2,3)	(3,4)	(1,2)	
(2,4,3)	(1,3,4)	(1,2,3)	(1,4,2)	()	(1,4)(2,3)	(1,3)(2,4)	(1,2)(3,4)	(2,3,4)	(1,2,4)	(1,4,3)	(1,3,2)	(2,3)	(1,4)	(1,2,4,3)	(1,3,4,2)	(3,4)	(1,3,2,4)	(1,4,2,3)	(1,2)	(2,4)	(1,2,3,4)	(1,3)	(1,4,3,2)	
(1,2,3)	(1,4,2)	(2,4,3)	(1,3,4)	(1,3)(2,4)	(1,2)(3,4)	()	(1,4)(2,3)	(1,4,3)	(1,3,2)	(2,3,4)	(1,2,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,4)	(1,4,2,3)	(1,2)	(3,4)	(1,3,2,4)	(1,3)	(1,4,3,2)	(2,4)	(1,2,3,4)	
(1,4,2)	(1,2,3)	(1,3,4)	(2,4,3)	(1,2)(3,4)	(1,3)(2,4)	(1,4)(2,3)	()	(1,3,2)	(1,4,3)	(1,2,4)	(2,3,4)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,3)	(1,2)	(1,4,2,3)	(1,3,2,4)	(3,4)	(1,4,3,2)	(1,2,3,4)	(1,3)	(2,4)	
(1,3,4)	(2,4,3)	(1,4,2)	(1,2,3)	(1,4)(2,3)	()	(1,2)(3,4)	(1,3)(2,4)	(1,2,4)	(2,3,4)	(1,3,2)	(1,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,2,4,3)	(1,3,2,4)	(3,4)	(1,2)	(1,4,2,3)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,3)	
(3,4)	(1,3,2,4)	(1,2)	(1,4,2,3)	(2,3)	(1,4)	(1,3,4,2)	(1,2,4,3)	(2,4)	(1,2,3,4)	(1,4,3,2)	(1,3)	()	(1,4)(2,3)	(1,2)(3,4)	(1,3)(2,4)	(2,4,3)	(1,3,4)	(1,4,2)	(1,2,3)	(2,3,4)	(1,2,4)	(1,3,2)	(1,4,3)	
(1,4,2,3)	(1,2)	(1,3,2,4)	(3,4)	(1,2,4,3)	(1,3,4,2)	(1,4)	(2,3)	(1,3)	(1,4,3,2)	(1,2,3,4)	(2,4)	(1,3)(2,4)	(1,2)(3,4)	(1,4)(2,3)	()	(1,2,3)	(1,4,2)	(1,3,4)	(2,4,3)	(1,4,3)	(1,3,2)	(1,2,4)	(2,3,4)	
(1,2)	(1,4,2,3)	(3,4)	(1,3,2,4)	(1,3,4,2)	(1,2,4,3)	(2,3)	(1,4)	(1,4,3,2)	(1,3)	(2,4)	(1,2,3,4)	(1,2)(3,4)	(1,3)(2,4)	()	(1,4)(2,3)	(1,4,2)	(1,2,3)	(2,4,3)	(1,3,4)	(1,3,2)	(1,4,3)	(2,3,4)	(1,2,4)	
(1,3,2,4)	(3,4)	(1,4,2,3)	(1,2)	(1,4)	(2,3)	(1,2,4,3)	(1,3,4,2)	(1,2,3,4)	(2,4)	(1,3)	(1,4,3,2)	(1,4)(2,3)	()	(1,3)(2,4)	(1,2)(3,4)	(1,3,4)	(1,3,4)	(2,4,3)	(1,2,3)	(1,2,4)	(1,4,2)	(1,3,2)	(1,3,2)	
(2,4)	(1,3)	(1,2,3,4)	(1,4,3,2)	(3,4)	(1,4,2,3)	(1,3,2,4)	(1,2)	(2,3)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3,4)	(1,4,3)	(1,2,4)	(1,3,2)	()	(1,3)(2,4)	(1,4,2,3)	(1,2)(3,4)	(2,4,3)	(1,2,3)	(1,3,4)	(1,4,2)	
(1,3)	(2,4)	(1,4,3,2)	(1,2,3,4)	(1,4,2,3)	(3,4)	(1,2)	(1,3,2,4)	(2,3)	(1,2,4,3)	(1,4)	(1,3,4,2)	(2,3,4)	(1,4,3)	(2,3,4)	(1,3,2)	(1,2,4)	(1,3)(2,4)	()	(1,2)(3,4)	(1,4,2,3)	(1,2,3)	(2,4,3)	(1,4,2)	(1,3,4)
(1,4,3,2)	(1,2,3,4)	(1,3)	(2,4)	(1,2)	(1,3,2,4)	(1,4,2,3)	(3,4)	(1,3,4,2)	(1,4)	(1,2,4,3)	(1,3,2,4)	(2,3)	(1,2,4)	(1,4,3)	(1,2,4)	(2,3,4)	(1,2)(3,4)	(1,4,2,3)	(1,3,2,4)	(1,4)	(1,2,3)	(2,4,3)		
(1,2,3,4)	(1,4,3,2)	(2,4)	(1,3)	(1,3,2,4)	(1,2)	(3,4)	(1,4,2,3)	(1,4)	(1,3,4,2)	(2,3)	(1,2,4,3)	(1,2,4)	(1,3,2)	(2,3,4)	(1,4,3)	(1,4)(2,3)	(1,2)(3,4)	()	(1,3)(2,4)	(1,4,2,3)	(1,3,4)	(2,4,3)	(1,2,3)	
(2,3)	(1,3,4,2)	(1,2,4,3)	(1,4)	(2,4)	(1,4,3,2)	(1,3)	(1,2,3,4)	(3,4)	(1,2)	(1,4,2,3)	(1,3,2,4)	(2,4,3)	(1,4,3)	(1,4,2)	(1,2,3)	(1,3,4)	(2,3,4)	(1,3,2)	(1,2,4)	(1,4,2,3)	(1,3,2,4)	(1,4,2,3)	(1,4)	
(1,2,4,3)	(1,4)	(2,3)	(1,3,4,2)	(1,3)	(1,2,3,4)	(2,4)	(1,4,3,2)	(1,4,2,3)	(1,3,2,4)	(3,4)	(1,2)	(1,2,3,4)	(1,4,2,3)	(1,2,3)	(1,3,4)	(2,4,3)	(1,4,3)	(1,2,4)	(1,4,2,3)	(1,4)	(1,2,3,4)	(1,4,2,3)		
(1,3,4,2)	(2,3)	(1,4)	(1,2,3,4)	(1,2,4,3)	(2,4)	(1,2,3,4)	(1,3)	(1,2)	(3,4)	(1,3,2,4)	(1,4,2,3)	(1,2,3,4)	(3,4)	(1,2,3)	(1,4,2,3)	(1,3,2,4)	(1,2,4)	(1,4,3)	(1,2,3,4)	(1,4,2,3)	(1,3,2,4)	(1,4)		
(1,4)	(1,2,4,3)	(1,3,4,2)	(2,3)	(1,2,3,4)	(1,3)	(1,4,3,2)	(2,4)	(1,4,2,3)	(1,3,2,4)	(1,2)	(3,4)	(1,2,3,4)	(1,4,2,3)	(1,2,3)	(1,4,2)	(2,4,3)	(1,2,4)	(1,4,3)	(1,3,2,4)	(1,4,2,3)	(1,3,2,4)	(1)		

