代幾 I 計算演習 (2005/10/27)

次の σ, τ の合成を計算しなさい。

Q.1

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 0 & 2 & 3 & 4 & 1 \end{pmatrix}, \tau = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 1 & 0 & 3 & 4 & 2 \end{pmatrix}$$

Q.2

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 1 & 0 & 4 & 3 & 2 \end{pmatrix}, \tau = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 0 & 4 & 3 & 1 & 2 \end{pmatrix}$$

Q.3

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 0 & 3 & 1 & 4 & 2 \end{pmatrix}, \tau = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 4 & 1 & 2 & 3 & 0 \end{pmatrix}$$

Q.4

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 2 & 3 & 1 & 0 & 4 \end{pmatrix}, \tau = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 2 & 0 & 3 & 4 & 1 \end{pmatrix}$$

Q.5

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 3 & 4 & 0 & 1 & 2 \end{pmatrix}, \tau = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 2 & 0 & 3 & 1 & 4 \end{pmatrix}$$

次の σ の符号を計算しなさい。

Q.6

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 1 & 2 & 3 & 0 & 4 \end{pmatrix}$$

Q.7

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 0 & 1 & 3 & 2 & 4 \end{pmatrix}$$

Q.8

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 0 & 3 & 4 & 1 & 2 \end{pmatrix}$$

Q.9

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 1 & 2 & 0 & 3 & 4 \end{pmatrix}$$

Q.10

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 1 & 0 & 4 & 2 & 3 \end{pmatrix}$$

Q.11

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 3 & 4 & 0 & 2 & 1 \end{pmatrix}$$

Q.12

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 4 & 0 & 2 & 1 & 3 \end{pmatrix}$$

Q.13

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 3 & 2 & 0 & 1 & 4 \end{pmatrix}$$

Q.14

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 0 & 1 & 2 & 4 & 3 \end{pmatrix}$$

Q.15

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 4 & 0 & 2 & 3 & 1 \end{pmatrix}$$

Q.16

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 2 & 3 & 1 & 4 & 0 \end{pmatrix}$$

Q.17

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 4 & 2 & 1 & 0 & 3 \end{pmatrix}$$

Q.18

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 3 & 4 & 0 & 2 & 1 \end{pmatrix}$$

Q.19

$$\sigma = \begin{pmatrix} 0 & 1 & 2 & 3 & 4 \\ 0 & 1 & 2 & 3 & 4 \end{pmatrix}$$