

# 代幾 I 計算演習 [問題] (2007/12/06)

問. 次の置換の符号を求めなさい

- Q.1 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\ 9 & 1 & 5 & 7 & 4 & 3 & 6 & 2 & 8 \end{pmatrix}$$
- Q.2 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 7 & 1 & 5 & 2 & 3 & 4 & 8 & 6 \end{pmatrix}$$
- Q.3 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 1 & 4 & 5 & 2 & 3 \end{pmatrix}$$
- Q.4 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 8 & 2 & 7 & 4 & 6 & 1 & 3 & 5 \end{pmatrix}$$
- Q.5 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 6 & 7 & 3 & 4 & 2 & 8 & 5 & 1 \end{pmatrix}$$
- Q.6 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 \\ 3 & 7 & 2 & 5 & 1 & 6 & 4 \end{pmatrix}$$
- Q.7 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 4 & 1 & 5 & 2 \end{pmatrix}$$
- Q.8 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\ 1 & 8 & 3 & 7 & 4 & 5 & 6 & 2 & 9 \end{pmatrix}$$
- Q.9 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\ 8 & 7 & 2 & 1 & 4 & 6 & 9 & 5 & 3 \end{pmatrix}$$
- Q.10 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 6 & 4 & 3 & 5 & 1 & 2 \end{pmatrix}$$
- Q.11 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 1 & 7 & 5 & 2 & 3 & 6 & 8 & 4 \end{pmatrix}$$
- Q.12 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\ 3 & 8 & 9 & 5 & 6 & 1 & 7 & 4 & 2 \end{pmatrix}$$
- Q.13 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 \\ 8 & 5 & 3 & 6 & 1 & 2 & 4 & 7 \end{pmatrix}$$
- Q.14 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 \\ 7 & 3 & 1 & 4 & 6 & 5 & 2 \end{pmatrix}$$
- Q.15 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 \\ 1 & 5 & 2 & 3 & 4 \end{pmatrix}$$
- Q.16 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 6 & 3 & 1 & 4 & 2 & 5 \end{pmatrix}$$
- Q.17 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 \\ 4 & 2 & 5 & 6 & 3 & 1 \end{pmatrix}$$
- Q.18 
$$\sigma = \begin{pmatrix} 1 & 2 & 3 & 4 & 5 & 6 & 7 & 8 & 9 \\ 8 & 9 & 1 & 7 & 4 & 3 & 2 & 6 & 5 \end{pmatrix}$$

## 代幾 I 計算演習 [解答] (2007/12/06)

A.1

$$\operatorname{sgn}\sigma = -1$$

A.10

$$\operatorname{sgn}\sigma = +1$$

A.2

$$\operatorname{sgn}\sigma = +1$$

A.11

$$\operatorname{sgn}\sigma = +1$$

A.3

$$\operatorname{sgn}\sigma = +1$$

A.12

$$\operatorname{sgn}\sigma = -1$$

A.4

$$\operatorname{sgn}\sigma = +1$$

A.13

$$\operatorname{sgn}\sigma = +1$$

A.5

$$\operatorname{sgn}\sigma = +1$$

A.14

$$\operatorname{sgn}\sigma = +1$$

A.6

$$\operatorname{sgn}\sigma = -1$$

A.15

$$\operatorname{sgn}\sigma = -1$$

A.7

$$\operatorname{sgn}\sigma = -1$$

A.16

$$\operatorname{sgn}\sigma = +1$$

A.8

$$\operatorname{sgn}\sigma = +1$$

A.17

$$\operatorname{sgn}\sigma = -1$$

A.9

$$\operatorname{sgn}\sigma = +1$$

A.18

$$\operatorname{sgn}\sigma = -1$$