

代数学幾何学 (A/B) 計算演習 [問題] (2009/11/19)

問. 次の置換 σ の符号 ($\text{sgn } \sigma$) を求めなさい

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

代数学幾何学 (A/B) 計算演習 [解答] (2009/11/19)

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

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