

Даны две подстановки. Найти указанное произведение .

**Задача 32.1.**

2

$$(\alpha\beta)^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 3 & 1 & 4 & 5 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 1 & 2 & 3 & 4 & 5 \end{bmatrix}$$

**Задача 32.2.**

2

$$\alpha\beta^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 4 & 2 & 5 & 3 & 1 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 4 & 5 & 2 & 1 \end{bmatrix}$$

**Задача 32.3.**

2

$$\alpha\beta^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 5 & 2 & 1 & 4 & 3 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 4 & 1 & 2 & 5 \end{bmatrix}$$

**Задача 32.4.**

2

$$(\alpha\beta)^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 4 & 1 & 3 & 5 & 2 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 5 & 2 & 3 & 4 & 1 \end{bmatrix}$$

**Задача 32.5.**

2

$$\beta\alpha^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 4 & 1 & 2 & 5 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 4 & 5 & 1 & 2 & 3 \end{bmatrix}$$

**Задача 32.6.**

2

$$(\alpha\beta)^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 4 & 2 & 1 & 5 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 5 & 3 & 1 & 4 \end{bmatrix}$$

**Задача 32.7.**

2

$$\alpha\beta^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 5 & 1 & 2 & 3 & 4 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 4 & 5 & 2 & 3 & 1 \end{bmatrix}$$

**Задача 32.8.**

2

$$\alpha^{-1}\beta = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 5 & 1 & 2 & 3 & 4 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 4 & 3 & 2 & 1 & 5 \end{bmatrix}$$

**Задача 32.9.**

2

$$(\alpha\beta)^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 4 & 3 & 5 & 2 & 1 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 5 & 1 & 4 & 2 & 3 \end{bmatrix}$$

**Задача 32.10.**

2

$$(\alpha\beta)^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 1 & 3 & 2 & 4 & 5 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 5 & 1 & 2 & 4 & 3 \end{bmatrix}$$

**Задача 32.11.**

2

$$\alpha^{-1}\beta = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 1 & 2 & 4 & 3 & 5 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 1 & 4 & 2 & 5 \end{bmatrix}$$

**Задача 32.12.**

2

$$(\alpha\beta)^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 3 & 1 & 4 & 5 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 5 & 1 & 4 & 2 \end{bmatrix}$$

**Задача 32.13.**

2

$$\alpha^{-1}\beta^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 5 & 2 & 4 & 1 & 3 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 1 & 4 & 2 & 5 \end{bmatrix}$$

**Задача 32.14.**

2

$$\alpha^{-1}\beta^{-1} = ?$$

$$\alpha = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 3 & 4 & 1 & 2 & 5 \end{bmatrix}, \beta = \begin{bmatrix} 1 & 2 & 3 & 4 & 5 \\ 2 & 5 & 1 & 3 & 4 \end{bmatrix}$$



**Подстановки**

№	
1	[3, 1, 2, 4, 5]
2	[1, 3, 4, 2, 5]
3	[1, 4, 5, 2, 3]
4	[2, 1, 3, 5, 4]
5	[1, 2, 4, 5, 3]
6	[5, 3, 4, 1, 2]
7	[4, 2, 3, 5, 1]
8	[5, 4, 3, 2, 1]
9	[1, 3, 4, 2, 5]
10	[2, 5, 3, 4, 1]
11	[4, 1, 3, 2, 5]
12	[1, 3, 5, 4, 2]
13	[2, 3, 4, 5, 1]
14	[1, 3, 2, 5, 4]
15	[1, 4, 2, 3, 5]
16	[1, 5, 4, 3, 2]
17	[1, 5, 4, 3, 2]
18	[1, 4, 2, 3, 5]
19	[1, 3, 5, 4, 2]
20	[3, 5, 1, 4, 2]
21	[4, 5, 3, 1, 2]
22	[2, 1, 4, 3, 5]
23	[5, 3, 2, 4, 1]
24	[1, 3, 2, 5, 4]
25	[2, 1, 3, 5, 4]
26	[4, 5, 2, 3, 1]
27	[3, 1, 2, 4, 5]
28	[5, 1, 2, 3, 4]