Вариант №1

Dima Trushin

Группа БПМИ111

1. Let
$$A = \begin{pmatrix} -1 & -2 & -5 \\ -4 & -7 & -15 \\ -2 & -1 & 6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & -2 & -5 \\ 2 & -3 & -3 & -9 \\ -2 & 1 & 0 & 3 \\ 1 & -3 & -4 & -9 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 2 & -3 & -2 & -5 \\ -5 & -5 & -4 & 3 & 2 \\ 5 & 1 & 5 & 3 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & 2 \\ 0 & 1 & -3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ -5 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №2

Roma Avdeev

Группа БПМИ222

1. Let
$$A = \begin{pmatrix} -1 & 2 & 5 \\ 5 & -9 & -26 \\ 4 & -11 & -16 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & -1 & -2 \\ -1 & 1 & 2 & 1 \\ -1 & 5 & -3 & 3 \\ -1 & 3 & -1 & 2 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 5 & -2 & 3 & 2 \\ -5 & -1 & 4 & 1 & -5 \\ 3 & 3 & 4 & -4 & -5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & -4 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 1 & 0 \\ 5 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №3

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & 5 \\ -5 & 6 & 27 \\ -3 & 2 & 14 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & 1 & 3 \\ -3 & 5 & -4 & -7 \\ -2 & 5 & -2 & -9 \\ 4 & -5 & 4 & 4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & -5 & -5 & -2 & -1 \\ -1 & -5 & -5 & -4 & -5 \\ 2 & 2 & -3 & 1 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & 3 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 5 & -2 & 1 \end{pmatrix}$$
. Find LU

Вариант №4

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & 4 \\ -3 & -2 & 11 \\ -2 & 3 & 4 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & 2 & 4 \\ -4 & 3 & -9 & -18 \\ -1 & 0 & -2 & -5 \\ -1 & 0 & -1 & -3 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & 5 & 3 & 5 & -1 \\ 2 & 5 & 2 & 4 & 2 \\ 2 & -1 & 4 & -4 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & 2 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 4 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №5

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & -4 \\ 5 & -19 & 25 \\ -3 & 9 & -26 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 5 & 5 & -1 \\ 1 & -4 & -8 & 2 \\ 2 & -13 & -2 & 3 \\ 5 & -29 & -9 & -16 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & 4 & -1 & -2 & -1 \\ 2 & 4 & -5 & 5 & -2 \\ 2 & 1 & -3 & -2 & 2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 3 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ -4 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №6

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & -1 \\ -4 & -7 & -3 \\ 5 & 15 & 11 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & -5 & -1 \\ 4 & 3 & -15 & -1 \\ 1 & 2 & -9 & -3 \\ 3 & 5 & -23 & -8 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & -2 & 3 & -1 & -2 \\ 4 & -3 & -3 & 2 & 1 \\ -5 & -5 & -1 & 4 & -1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & -5 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ -1 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №7

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & 2 \\ 5 & 26 & -12 \\ 5 & 29 & -17 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -3 & -3 & -4 \\ 2 & -5 & -5 & -6 \\ 2 & -3 & -2 & -4 \\ 2 & -4 & -3 & -5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -2 & -3 & 3 & 4 \\ -5 & -5 & 2 & -2 & 1 \\ -4 & 4 & -1 & 4 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & -5 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ 2 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №8

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & 5 \\ 3 & 4 & -18 \\ -1 & -4 & 15 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & -1 & 2 \\ -2 & 1 & 3 & 0 \\ 4 & -3 & 0 & -2 \\ -5 & 4 & -3 & 1 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & -3 & 3 & -5 & 1 \\ -1 & 5 & -3 & 5 & -5 \\ 1 & 1 & 4 & -2 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -3 & 1 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 5 & 3 & 1 \end{pmatrix}$$
. Find LU

Вариант №9

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & 2 \\ -5 & 26 & 6 \\ 1 & -7 & 7 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 4 & 1 & 5 \\ -5 & -19 & -3 & -23 \\ -2 & -7 & -1 & -9 \\ -1 & -5 & -2 & -5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & 4 & -3 & 3 & 5 \\ -5 & -1 & 2 & -4 & 1 \\ 3 & 5 & -1 & -1 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & -1 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ 2 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №10

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & -4 \\ -2 & 9 & -9 \\ -2 & 9 & -8 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & 5 & 5 \\ 1 & -1 & 0 & 1 \\ -1 & 3 & -11 & -10 \\ -1 & 3 & -9 & -9 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & -5 & -1 & 5 & 1 \\ -2 & 5 & 1 & 5 & -5 \\ 4 & 3 & -1 & -1 & -3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & 2 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ -4 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №11

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & -1 \\ -2 & -3 & -4 \\ -4 & -7 & -5 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 3 & 3\\ 1 & 0 & -1 & -4\\ 2 & 0 & -3 & -10\\ 4 & 2 & -9 & -15 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -5 & -1 & -2 & 3 \\ 3 & 2 & 5 & 5 & -3 \\ -4 & -4 & 3 & 5 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & 4 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ -1 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №12

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & 2 \\ -4 & -7 & 7 \\ 5 & 5 & -4 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & 3 & 3 \\ -2 & 5 & -10 & -4 \\ -2 & 3 & -1 & -12 \\ -1 & 0 & 2 & 4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & 5 & 4 & -5 & -4 \\ 4 & -5 & 5 & 4 & 5 \\ -2 & -4 & 5 & -1 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & -5 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ 2 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №13

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & -2 \\ 3 & -2 & 3 \\ 2 & -4 & 11 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 5 & 5 \\ 2 & -7 & -6 & -11 \\ 3 & -8 & -20 & -11 \\ 2 & -7 & -5 & -15 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & 4 & -3 & -2 & -3 \\ 4 & 3 & -4 & 5 & 5 \\ -3 & -1 & 2 & -1 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -3 & -2 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ -2 & 3 & 1 \end{pmatrix}$$
. Find LU

Вариант №14

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -3 \\ 1 & 4 & 1 \\ 2 & 2 & 15 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 2 & 2\\ 1 & 0 & -3 & -7\\ 1 & -1 & -3 & -8\\ 1 & -4 & -5 & -20 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & 2 & -5 & 3 & 3 \\ -3 & 1 & -5 & 5 & 2 \\ -2 & -5 & -4 & 3 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & -2 \\ 0 & 1 & 4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -3 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №15

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & 4 \\ -1 & 0 & 5 \\ 5 & 10 & -14 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 4 & 2 & 1 \\ -1 & 5 & -3 & 5 \\ 1 & -3 & -6 & 1 \\ 5 & -22 & -1 & -12 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 5 & -3 & -5 & 4 \\ 1 & -5 & 2 & -2 & -3 \\ -1 & 4 & 5 & -4 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & -5 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 4 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №16

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & 4 \\ -3 & 10 & 17 \\ 2 & -3 & 8 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & 2 & 2 \\ -1 & 0 & 2 & 0 \\ -2 & 5 & -17 & -8 \\ 5 & 0 & -8 & -5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -3 & -3 & -3 & -3 \\ 4 & -3 & -3 & -4 & -4 \\ 3 & -2 & 3 & 1 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & -2 \\ 0 & 1 & -3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ 4 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №17

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & -4 \\ 5 & -4 & 16 \\ -2 & 4 & -15 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & -1 & -2 \\ -1 & 1 & 3 & 3 \\ 2 & 0 & -11 & -4 \\ -2 & 5 & 3 & -10 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 3 & 3 & -5 & 1 \\ -2 & -1 & -1 & 3 & 4 \\ 1 & 2 & 5 & 2 & -1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 2 \\ 0 & 1 & -2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ -4 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №18

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 2 & -3 \\ 1 & -1 & 0 \\ -4 & 5 & -2 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -3 & 1 & 3 \\ 1 & -4 & 0 & 0 \\ -1 & 2 & -1 & -5 \\ -1 & 5 & -1 & 2 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & 1 & -3 & 1 & -5 \\ 4 & 5 & -4 & 4 & -1 \\ -5 & 5 & 5 & -5 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & 4 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 1 & 0 \\ -3 & 3 & 1 \end{pmatrix}$$
. Find LU

Вариант №19

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & -3 \\ 5 & -24 & 10 \\ -1 & 6 & -7 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & -2 & -1 \\ 2 & -3 & -2 & -1 \\ -2 & 3 & 3 & 2 \\ 2 & -2 & -4 & -5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 3 & -1 & 4 & 4 \\ -4 & -5 & -4 & -1 & -4 \\ -5 & -3 & 2 & -2 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 1 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ -3 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №20

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & -2 \\ 5 & -19 & 6 \\ -1 & 3 & 3 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 2 & 2 & -1 \\ 1 & -1 & 2 & -1 \\ 2 & -3 & 1 & -1 \\ -3 & 4 & -1 & 1 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & 1 & 5 & 3 & -4 \\ -5 & 4 & -1 & -5 & -1 \\ -1 & -1 & -2 & 5 & 2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 1 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ -2 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №21

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & 5 \\ -2 & 7 & 15 \\ -4 & 15 & 36 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 3 & 3\\ 4 & 3 & -9 & -10\\ 1 & 4 & -13 & -6\\ -3 & -1 & 4 & 1 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -5 & -2 & 5 & -3 \\ 4 & 2 & 4 & -4 & 1 \\ -2 & 1 & 5 & 3 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & 4 \\ 0 & 1 & -3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ 5 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №22

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & 3 \\ 1 & 0 & -8 \\ -2 & 6 & -13 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & -1 & -1 \\ -1 & 0 & 5 & 0 \\ -3 & 4 & 0 & 2 \\ 1 & -3 & 3 & 4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & -3 & -3 & 4 & -3 \\ 3 & -2 & 2 & 5 & 1 \\ 5 & 5 & 3 & 1 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & 2 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 3 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №23

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -5 \\ 1 & 4 & 6 \\ 1 & -2 & 1 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 4 & 5 \\ 5 & -6 & -15 & -23 \\ 2 & -1 & -14 & -9 \\ 5 & -3 & -26 & -42 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & -3 & 1 & -4 & -4 \\ 2 & -5 & 2 & 4 & -4 \\ 2 & -1 & 4 & 5 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & -1 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -5 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №24

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & 1 \\ -5 & 26 & 0 \\ -1 & 7 & -8 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 2 & -3 & -1 \\ 2 & -5 & 2 & -3 \\ -1 & 3 & 2 & 3 \\ 3 & -7 & 2 & 2 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 2 & 1 & 3 & -3 \\ 3 & 3 & -2 & -5 & 5 \\ -5 & 1 & -1 & -5 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & 1 \\ 0 & 1 & -2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ 1 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №25

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & -1 \\ 5 & 6 & 8 \\ -4 & -7 & -12 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -3 & -2 & -3 \\ -2 & 5 & 5 & 3 \\ 1 & -4 & 0 & -1 \\ 1 & -1 & -5 & -1 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & 5 & 1 & 5 & -2 \\ 3 & -3 & -2 & 2 & 1 \\ -3 & 2 & 1 & 5 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 4 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ -1 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №26

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & 3 \\ -3 & -5 & 6 \\ 5 & 11 & -17 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 5 & 2 & 2\\ 4 & -21 & -4 & -4\\ 3 & -10 & -25 & -27\\ 5 & -26 & -10 & -3 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 5 & -5 & -5 & 1 \\ 3 & -2 & -4 & 2 & -1 \\ 5 & -5 & 2 & 2 & -3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & -5 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ 3 & 3 & 1 \end{pmatrix}$$
. Find LU

Вариант №27

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -4 \\ -2 & -5 & -4 \\ -5 & -20 & -39 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 2 & 1\\ 2 & -3 & -2 & 3\\ -3 & 4 & 3 & 1\\ 5 & -1 & -13 & -41 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & -2 & -1 & 5 & 4 \\ -3 & 1 & 5 & -4 & 3 \\ 5 & 5 & -2 & -4 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & 5 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -4 & -4 & 1 \end{pmatrix}$$
. Find LU

Вариант №28

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 2 & 5 \\ -3 & 7 & 11 \\ -5 & 5 & 46 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 3 & 4\\ 1 & -2 & 0 & -3\\ 1 & -2 & -1 & 1\\ 5 & 0 & -29 & -30 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & -4 & -5 & -3 & 4 \\ 2 & 1 & 5 & -5 & -4 \\ -3 & 2 & -2 & -2 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & 5 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 1 & 0 \\ 5 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №29

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & 5 \\ 5 & 26 & -29 \\ 4 & 16 & -3 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & 2 & 1 \\ -3 & 5 & -3 & -1 \\ -1 & 1 & 2 & 2 \\ -3 & 3 & 4 & 5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & -5 & 3 & 2 & 3 \\ -3 & -4 & -5 & 1 & -3 \\ -3 & 3 & 3 & 5 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & -4 \\ 0 & 1 & 4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ 5 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №30

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & -1 \\ -5 & 26 & -9 \\ 2 & -6 & -13 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 3 & 5 \\ 5 & -4 & -17 & -20 \\ 3 & -8 & 0 & -36 \\ 4 & -9 & 0 & -54 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & -3 & 5 & -5 & 3 \\ 2 & 4 & 3 & -1 & 1 \\ 3 & 2 & 5 & 4 & -5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & -2 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ -1 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №31

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & -3 \\ 1 & 3 & -1 \\ -4 & -5 & -23 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 4 & -3 & -2 \\ 1 & 3 & -6 & -6 \\ -1 & -3 & 5 & 5 \\ 1 & 0 & -16 & -20 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 4 & -5 & -1 & -2 \\ 2 & 5 & -1 & 3 & -4 \\ -5 & -1 & -5 & 4 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & 4 \\ 0 & 1 & -3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ -3 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №32

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & -3 \\ -3 & 16 & -8 \\ 4 & -25 & 8 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 5 & 4 \\ 5 & -6 & -21 & -19 \\ 4 & -1 & -31 & -20 \\ 5 & -8 & -15 & -16 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & 3 & 2 & -2 & 3 \\ 5 & 3 & 2 & -2 & 1 \\ 3 & 2 & -3 & -1 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & -4 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ -3 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №33

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & 2 \\ -2 & 11 & 9 \\ 1 & -1 & 19 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 1 & -2 \\ -2 & -3 & 5 & -3 \\ 1 & 3 & -6 & 2 \\ -3 & -2 & 1 & -6 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & -1 & -1 & 1 & -4 \\ 5 & -1 & -4 & -5 & -1 \\ 3 & -2 & 4 & -3 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & -1 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ 2 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №34

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & -5 \\ -3 & 4 & -20 \\ -3 & 6 & -29 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 4 & 1 & 5 \\ 2 & -9 & 2 & -12 \\ 2 & -10 & 5 & -12 \\ 4 & -11 & -22 & -15 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & 2 & -2 & 4 & -5 \\ 5 & -5 & 4 & -5 & -1 \\ -2 & 5 & 2 & 5 & -1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & 3 \\ 0 & 1 & -3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ -5 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №35

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -4 & 3 \\ -2 & -7 & 10 \\ 2 & 13 & 15 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 2 & -2 \\ 3 & -2 & -7 & 1 \\ -2 & 1 & 4 & -1 \\ -1 & 0 & 1 & 0 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & 5 & -3 & -3 & 4 \\ -4 & 2 & 5 & -2 & -2 \\ 3 & 1 & 1 & 4 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & -2 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -4 & 1 & 0 \\ 3 & -4 & 1 \end{pmatrix}$$
. Find LU

Вариант №36

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & 4 \\ -4 & -19 & 15 \\ -5 & -22 & 18 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 1 & 2 \\ 4 & 3 & -5 & -7 \\ -2 & 1 & 4 & 0 \\ 4 & 3 & -4 & -7 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -2 & -1 & 5 & -5 & -1 \\ -5 & -1 & 2 & -1 & -2 \\ 1 & 5 & -4 & -2 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & 5 \\ 0 & 1 & -3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ 4 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №37

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -1 \\ 5 & 16 & 1 \\ -2 & -4 & -9 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & -4 & -3 \\ -2 & 3 & 5 & 3 \\ 3 & -5 & -8 & -5 \\ 4 & -7 & -15 & -10 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -2 & 2 & -2 & 4 & 1 \\ 4 & 2 & 1 & -5 & -4 \\ 2 & 2 & 1 & -4 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 2 \\ 0 & 1 & -2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -1 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №38

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & -3 \\ -5 & 16 & -12 \\ 4 & -13 & 10 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & -4 & 4 \\ 1 & 0 & 0 & 3 \\ -2 & 0 & 1 & -5 \\ -1 & -2 & 5 & -7 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -3 & 3 & 5 & -2 \\ -2 & 3 & -4 & -2 & -1 \\ 2 & 3 & 3 & -1 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & -4 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ -3 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №39

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -3 \\ 3 & 10 & 13 \\ 3 & 5 & -6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -3 & 3 & 5 \\ -2 & 5 & -1 & -6 \\ -2 & 5 & -2 & -1 \\ 2 & -2 & -11 & -22 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 3 & -4 & -2 & 2 \\ -3 & -2 & 5 & -3 & 5 \\ 4 & -4 & 1 & -2 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -3 & -3 \\ 0 & 1 & 4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -3 & -4 & 1 \end{pmatrix}$$
. Find LU

Вариант №40

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & 1 \\ 4 & -11 & -8 \\ -3 & 11 & -4 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 3 & 2 \\ 2 & -7 & -9 & -3 \\ 2 & -10 & -19 & 1 \\ 2 & -4 & -1 & -6 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 5 & -5 & -4 & 2 \\ -3 & -2 & 1 & -4 & 5 \\ 2 & -3 & -2 & 2 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -4 & 3 \\ 0 & 1 & -2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ 1 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №41

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & 1 \\ -1 & -4 & 3 \\ -3 & -18 & -2 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 2 & 5 \\ 4 & -13 & -4 & -16 \\ 3 & -6 & -19 & -24 \\ 1 & 0 & -9 & -33 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 5 & -1 & -3 & -2 \\ 1 & -5 & 2 & -4 & 1 \\ 4 & -3 & 3 & -5 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 3 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ 1 & -2 & 1 \end{pmatrix}$$
. Find LU

Вариант №42

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & 1 \\ 1 & -3 & -3 \\ 1 & -7 & 6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & -2 & -4 \\ 2 & -3 & 0 & 5 \\ -2 & 3 & 1 & -3 \\ 4 & -6 & -2 & 5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & -3 & 3 & 1 & -1 \\ -5 & -4 & 2 & -1 & 2 \\ 5 & 2 & 3 & 1 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & -1 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ 1 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №43

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & 1 \\ -5 & -24 & 8 \\ -2 & -9 & 6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 5 & 1 & -2 \\ -1 & 4 & 3 & -1 \\ 3 & -14 & -4 & 3 \\ 1 & -1 & -11 & 1 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & 1 & -3 & -4 & 1 \\ 1 & -1 & 1 & 5 & 3 \\ 5 & -5 & -4 & -2 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & 2 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ 1 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №44

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & -4 \\ -1 & 6 & -8 \\ 5 & -29 & 37 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -3 & 1 & 1 \\ 3 & -8 & 2 & 5 \\ 2 & -7 & 4 & -3 \\ 1 & -4 & 3 & -5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & 2 & 4 & -4 & -4 \\ -2 & -4 & 2 & -1 & 4 \\ -2 & -2 & -2 & -3 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & -5 \\ 0 & 1 & 4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ -4 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №45

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & -5 \\ 1 & -4 & 4 \\ 5 & -30 & 31 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 5 & 4 \\ 5 & 4 & -23 & -18 \\ 3 & 2 & -12 & -14 \\ -1 & 1 & 0 & 3 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & -2 & 1 & 4 & 4 \\ -3 & -3 & -5 & 1 & -5 \\ -4 & 1 & -1 & -3 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & -5 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ -5 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №46

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & 4 \\ -4 & 17 & 20 \\ -3 & 13 & 17 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & -3 & -2 \\ -1 & -2 & 2 & -1 \\ 3 & 0 & -11 & -13 \\ 1 & -4 & -7 & -16 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & -4 & 3 & -1 & -1 \\ 4 & -3 & 1 & 3 & -1 \\ 2 & -4 & 2 & -2 & -5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & 3 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ 4 & -4 & 1 \end{pmatrix}$$
. Find LU

Вариант №47

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -4 & -5 \\ 5 & 21 & 28 \\ 4 & 17 & 24 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -2 & -1 & 1 \\ -1 & 1 & 2 & 1 \\ 2 & -3 & -4 & -1 \\ -2 & 5 & 2 & -4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -2 & -2 & 2 & 4 & -1 \\ 4 & -5 & -2 & -3 & -1 \\ 5 & -4 & -4 & -1 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & -4 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -4 & 1 & 0 \\ -5 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №48

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 2 & 1 \\ -2 & 5 & -3 \\ 2 & -9 & 24 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & 2 & 4 \\ -2 & 3 & -7 & -11 \\ -5 & 3 & -3 & -16 \\ -5 & 0 & 3 & -2 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & 4 & 3 & -1 & -5 \\ 2 & 4 & -4 & 2 & 1 \\ 4 & 2 & 3 & 4 & 2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & -2 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 1 & 0 \\ 1 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №49

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & -1 \\ -3 & 13 & 2 \\ 4 & -11 & 30 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & -2 & -4 \\ -1 & 0 & 0 & 5 \\ 4 & 1 & -3 & -17 \\ 2 & 3 & -8 & -2 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & 5 & 1 & 4 & -4 \\ -4 & 1 & 3 & 5 & -5 \\ 4 & -1 & 5 & -1 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & -4 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ -1 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №50

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & 5 \\ 1 & 3 & -7 \\ 1 & 3 & -6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 2 & -1 \\ 2 & -3 & -5 & 5 \\ 4 & -1 & -4 & -6 \\ 1 & 0 & 4 & -6 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & -2 & 5 & 5 & -4 \\ -4 & -5 & 5 & -2 & 5 \\ 4 & -3 & -1 & 4 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & -1 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ 5 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №51

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & -3 \\ -3 & 16 & -13 \\ 5 & -23 & 8 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & 2 & 2 \\ -2 & 1 & -3 & -8 \\ -1 & 0 & 0 & -5 \\ -3 & 1 & -2 & -13 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & 1 & 3 & 5 & 1 \\ 2 & 4 & 5 & 1 & 2 \\ 5 & -1 & 4 & -2 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & -5 \\ 0 & 1 & -2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ -3 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №52

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & -2 \\ -2 & 3 & -5 \\ -4 & 8 & -11 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -3 & 1 & -3 \\ 1 & -4 & 0 & -2 \\ 5 & -17 & 4 & -14 \\ 3 & -8 & 1 & -6 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -4 & 4 & -2 & 1 & -4 \\ -2 & -4 & 5 & -3 & -3 \\ 3 & -3 & -4 & -3 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & 4 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ -2 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №53

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & -3 \\ -5 & -24 & -12 \\ -3 & -13 & -2 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & 2 & 2 \\ -5 & 4 & -5 & -7 \\ -2 & 4 & -13 & -15 \\ -1 & 4 & -18 & -7 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & 2 & -2 & 3 & 4 \\ -4 & -2 & 1 & -4 & -1 \\ -2 & 1 & 3 & 2 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & 3 \\ 0 & 1 & -2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ -3 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №54

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & 2 \\ -4 & -7 & 3 \\ 3 & 3 & 10 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 3 & 2\\ 1 & -2 & -6 & 3\\ 4 & -15 & -4 & -20\\ 4 & -16 & 5 & -44 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 3 & 3 & 3 & 1 \\ 1 & -2 & -3 & 2 & 3 \\ 2 & -4 & -3 & -1 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & -3 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ 2 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №55

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & 1 \\ -1 & 4 & -3 \\ -5 & 10 & 26 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & -1 & 2 \\ -2 & 1 & 5 & -2 \\ -2 & 3 & -2 & -5 \\ 4 & 0 & -11 & -6 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -5 & 2 & -2 & -5 & 4 \\ 4 & 3 & 2 & -3 & -2 \\ -4 & -1 & 2 & 3 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 5 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ 1 & 4 & 1 \end{pmatrix}$$
. Find LU

Вариант №56

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -4 & -4 \\ -5 & -19 & -22 \\ 3 & 11 & 15 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -3 & 5 & -4 \\ -1 & 2 & -1 & -1 \\ -2 & 4 & -1 & 3 \\ 4 & -8 & 3 & 0 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & 2 & -3 & -1 & -1 \\ 1 & 1 & 1 & -5 & 5 \\ 4 & -1 & 1 & -4 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & -3 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -4 & 1 & 0 \\ -4 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №57

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -4 & 2 \\ 5 & 21 & -9 \\ -2 & -12 & 1 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 5 & 3\\ 3 & -8 & -19 & -4\\ 1 & -4 & -2 & -7\\ 2 & -10 & 3 & -24 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 5 & 4 & -5 & -5 \\ 3 & -3 & -3 & 1 & -5 \\ 3 & -4 & 1 & 1 & -3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 2 \\ 0 & 1 & 4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -4 & 1 & 0 \\ 2 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №58

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & 2 \\ -4 & 5 & 7 \\ -5 & 4 & 12 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 4 & 1 & -2 \\ 2 & -7 & -3 & 3 \\ -1 & 1 & 5 & 0 \\ -1 & 0 & 4 & 2 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & -4 & 5 & -4 & 3 \\ 3 & -3 & -2 & -5 & 1 \\ 1 & -5 & -3 & -5 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & 5 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 2 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №59

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & -2 \\ -3 & 10 & -1 \\ 3 & -12 & -8 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 4 & 3 & 5 \\ 5 & -19 & -17 & -21 \\ 1 & -7 & 2 & -15 \\ 3 & -15 & -4 & -26 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & 2 & 4 & 3 & -1 \\ -1 & -2 & -4 & -2 & 2 \\ -2 & 5 & 1 & 2 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & -3 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ -2 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №60

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & -5 \\ -5 & -4 & -28 \\ 5 & 4 & 29 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & -2 & -1 \\ -3 & -2 & 3 & 5 \\ 2 & -1 & 4 & -5 \\ -2 & -1 & 2 & 0 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -2 & 1 & 2 & 4 & 2 \\ 1 & 1 & -5 & -1 & -2 \\ 1 & -2 & 1 & -2 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & -5 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ -5 & 3 & 1 \end{pmatrix}$$
. Find LU

Вариант №61

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & -2 \\ -3 & 16 & -9 \\ -5 & 24 & -6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 5 & 5 & 3\\ 1 & -6 & -6 & 1\\ 4 & -16 & -15 & -29\\ 4 & -16 & -18 & -27 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & 1 & 5 & 1 & 1 \\ 1 & 4 & -1 & -1 & 1 \\ 1 & 5 & -4 & -1 & -3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & 5 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ -2 & 3 & 1 \end{pmatrix}$$
. Find LU

Вариант №62

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & -3 \\ 3 & -2 & 7 \\ 2 & -4 & 11 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & 1 & 3 \\ 1 & 0 & 0 & 2 \\ -2 & -2 & 3 & 2 \\ -2 & 5 & -6 & -12 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 1 & -5 & -3 & 4 \\ -1 & 5 & -4 & -3 & 1 \\ -5 & -1 & -3 & -3 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -3 & -2 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ -3 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №63

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & 5 \\ -1 & 5 & 10 \\ -5 & 19 & 21 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 2 & 1 \\ -3 & 2 & 2 & 0 \\ 4 & -3 & -3 & 0 \\ 5 & -2 & 0 & 3 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & 4 & 5 & -5 & 1 \\ -5 & 4 & 4 & -3 & 2 \\ -4 & -3 & -1 & 5 & 2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 5 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ 5 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №64

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & -4 \\ 5 & 11 & 18 \\ -1 & -5 & 3 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 2 & 4 & 1\\ 2 & -5 & -6 & -1\\ -1 & 4 & -1 & 4\\ 5 & -13 & -12 & -13 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & -3 & 3 & 1 & 2 \\ -3 & 5 & -2 & 1 & -4 \\ -4 & -5 & 1 & -1 & -3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 1 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ -4 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №65

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 2 & 2 \\ 1 & -1 & 1 \\ -5 & 15 & 26 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 1 & 3 \\ 5 & -16 & -1 & -11 \\ 3 & -4 & -22 & -30 \\ 2 & -4 & -14 & -11 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -2 & 1 & -3 & -2 \\ 1 & 2 & 2 & -3 & 5 \\ 5 & 3 & -2 & 4 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & 5 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 1 & 0 \\ 2 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №66

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & 4 \\ 5 & -24 & -17 \\ 2 & -9 & -4 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 5 & 2 & 1 \\ -1 & 4 & 3 & 2 \\ 4 & -21 & -8 & 2 \\ 4 & -16 & -10 & -19 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & 3 & -4 & 1 & -3 \\ -5 & -1 & -1 & -5 & -3 \\ -5 & 3 & -5 & 4 & -3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & -2 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ 4 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №67

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & 5 \\ -1 & 4 & 0 \\ -5 & 19 & 6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & -1 & 3 \\ -1 & 0 & 0 & 0 \\ -3 & -2 & 3 & -9 \\ -2 & -3 & 1 & -4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -2 & -2 & -1 & 1 & -1 \\ 2 & 5 & -4 & -4 & -2 \\ -3 & 3 & 2 & 1 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 5 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ 5 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №68

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & -4 \\ 2 & 11 & 13 \\ 4 & 19 & 12 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 1 & -1 \\ 4 & -3 & -5 & -1 \\ -3 & 1 & 4 & 4 \\ -1 & -1 & 2 & 5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & 5 & -1 & 1 & -1 \\ -2 & -2 & 3 & -3 & -4 \\ 2 & -3 & -2 & 4 & -5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -2 & -4 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ -4 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №69

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & 5 \\ 3 & -2 & -10 \\ -4 & 2 & 11 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 5 & 5 & 3\\ 2 & -11 & -13 & -1\\ 5 & -24 & -21 & -22\\ 5 & -23 & -20 & -24 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & 1 & 2 & 1 & 1 \\ 3 & 1 & 1 & 4 & 3 \\ -4 & 5 & -4 & 5 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -3 & 4 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ 5 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №70

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & -2 \\ 4 & 9 & 12 \\ 3 & 4 & -1 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 2 & 2 & 5\\ 2 & -5 & -3 & -7\\ 3 & -8 & -5 & -4\\ 1 & 2 & -5 & -23 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & -5 & 4 & 1 & -4 \\ -4 & 3 & -3 & -5 & -1 \\ -1 & -5 & -3 & -3 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -4 & -3 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ -2 & -4 & 1 \end{pmatrix}$$
. Find LU

Вариант №71

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 2 & 3 \\ -2 & 5 & 9 \\ 5 & -13 & -23 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 3 & 1 & -3 \\ -1 & -4 & 1 & 1 \\ -2 & -7 & 1 & 2 \\ -5 & -19 & 4 & 4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & -3 & 3 & -2 & -1 \\ 5 & 5 & -1 & -1 & -1 \\ -2 & 1 & 2 & 2 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & -5 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 1 & 0 \\ 3 & -3 & 1 \end{pmatrix}$$
. Find LU

Вариант №72

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -3 \\ 4 & 13 & 9 \\ 5 & 14 & 19 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 5 & 4 \\ 2 & -7 & -6 & -3 \\ 5 & -14 & -28 & -26 \\ 3 & -8 & -21 & -16 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 2 & -3 & -5 & -1 & 1 \\ 5 & 3 & -2 & 3 & 2 \\ 1 & 4 & -4 & -5 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -4 & -5 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -3 & 3 & 1 \end{pmatrix}$$
. Find LU

Вариант №73

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -3 \\ -3 & -8 & -14 \\ -5 & -20 & 11 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 5 & 5\\ 1 & 0 & -7 & -4\\ 5 & -7 & -20 & -29\\ 3 & -1 & -21 & -10 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -2 & 3 & 5 & 4 & 1 \\ 4 & -4 & -2 & 3 & 5 \\ -1 & 2 & -3 & -2 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & 5 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -3 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №74

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 4 & 3 \\ 5 & -19 & -14 \\ -3 & 10 & 8 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -2 & 3 & -3 \\ 1 & 3 & -2 & 2 \\ -2 & -5 & 4 & -4 \\ -2 & -7 & 2 & -3 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & -3 & 1 & -5 & -1 \\ 2 & 5 & 2 & -4 & 2 \\ 2 & 2 & -4 & 1 & -1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 3 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 4 & 1 & 0 \\ 3 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №75

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 5 & 4 \\ -1 & 6 & 9 \\ -3 & 13 & 3 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 2 & 1\\ 2 & -5 & -3 & -7\\ 5 & -13 & -9 & -10\\ 2 & -8 & -5 & 2 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -4 & 5 & 2 & 4 & -5 \\ -1 & -3 & 4 & -1 & 2 \\ -1 & 5 & -4 & -4 & -1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 3 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 5 & 1 & 0 \\ 4 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №76

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & -2 \\ -1 & 0 & -4 \\ -4 & 1 & -17 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 2 & 2 & 4 \\ 3 & -5 & -7 & -9 \\ 1 & -3 & 0 & -11 \\ 2 & -6 & -4 & -7 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 1 & 1 & 4 & -1 & 5 \\ 2 & 1 & -3 & 3 & -4 \\ -5 & 3 & -3 & 2 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 4 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ -2 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №77

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -4 & -5 \\ -5 & -19 & -24 \\ 1 & 1 & 3 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & 2 & 2 \\ -4 & 3 & -5 & -4 \\ 3 & 0 & -4 & -3 \\ 3 & 1 & -1 & -26 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & -4 & -2 & 2 & -1 \\ 3 & 5 & -4 & -3 & 2 \\ -3 & -2 & 5 & 5 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 5 & -1 \\ 0 & 1 & 3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -4 & 1 & 0 \\ -5 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №78

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & 3 \\ 5 & 26 & -17 \\ -4 & -25 & 23 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & 1 & 3 \\ -1 & 0 & 0 & -1 \\ -1 & 2 & 1 & 2 \\ -2 & -6 & -4 & -11 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -5 & -2 & 1 & 5 \\ -3 & -5 & 2 & -3 & 4 \\ -3 & -4 & 3 & -3 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & 4 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ 3 & 2 & 1 \end{pmatrix}$$
. Find LU

Вариант №79

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 3 & 2 \\ 2 & -5 & -2 \\ -3 & 4 & -3 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 5 & 5 \\ 5 & -6 & -21 & -29 \\ 3 & 2 & -34 & 0 \\ 1 & -3 & 2 & -9 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -2 & -3 & 3 & 3 & -4 \\ 1 & -3 & -1 & 3 & 4 \\ -1 & -3 & 4 & 4 & 1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -2 & 3 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 3 & 1 & 0 \\ 2 & -2 & 1 \end{pmatrix}$$
. Find LU

Вариант №80

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & -1 \\ -1 & -2 & 1 \\ -3 & -11 & -6 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -5 & 5 & -2 \\ -1 & 4 & -1 & 4 \\ 4 & -15 & 1 & -23 \\ 5 & -20 & 4 & -16 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & 3 & -1 & -3 & 5 \\ -2 & 2 & -1 & 5 & 1 \\ 4 & 4 & -4 & -2 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 3 \\ 0 & 1 & 2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ -1 & -2 & 1 \end{pmatrix}$$
. Find LU

Вариант №81

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 1 & -4 \\ -2 & 3 & -13 \\ 1 & 0 & 0 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 2 & 2 & 2\\ 1 & -3 & 1 & 2\\ 1 & 3 & -18 & -20\\ 2 & 1 & -15 & -33 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & 4 & 5 & -5 & -1 \\ -5 & -5 & -2 & 1 & -1 \\ -1 & 5 & 5 & -5 & -2 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & -1 \\ 0 & 1 & -1 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 0 \\ -4 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №82

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & 3 \\ 1 & 2 & -1 \\ 4 & 9 & -1 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -1 & -1 & 1 \\ -1 & 2 & 2 & 2 \\ 1 & -4 & -5 & -11 \\ -2 & -2 & -3 & -16 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & -2 & -4 & -1 & -1 \\ -1 & -1 & -5 & -3 & 2 \\ -2 & 5 & -1 & -2 & 5 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & -4 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 3 & -2 & 1 \end{pmatrix}$$
. Find LU

Вариант №83

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & 2 \\ -4 & -3 & 10 \\ 3 & 7 & 3 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 2 & 5\\ 4 & 5 & -9 & -25\\ 4 & 0 & -3 & -1\\ 1 & 2 & -6 & -8 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -3 & 3 & 5 & 5 & -5 \\ -5 & -1 & -5 & -2 & 2 \\ 4 & -3 & -1 & 1 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & -3 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 2 & -2 & 1 \end{pmatrix}$$
. Find LU

Вариант №84

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -5 & 4 \\ -4 & -19 & 21 \\ 5 & 20 & -44 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 3 & 2 & 2 \\ -1 & 4 & 0 & 3 \\ 3 & -13 & 1 & -9 \\ 5 & -14 & -9 & -13 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 3 & 5 & -2 & 1 & -3 \\ -5 & 2 & -4 & 2 & -5 \\ -5 & 3 & -1 & 4 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 4 & -5 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -5 & 1 & 0 \\ 4 & -5 & 1 \end{pmatrix}$$
. Find LU

Вариант №85

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & 2 & 5 \\ 1 & -1 & -4 \\ 2 & -9 & -14 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 1 & 3 & 1 \\ 5 & -4 & -19 & -1 \\ 1 & 0 & -6 & 2 \\ 1 & 1 & -8 & 5 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & -3 & 5 & -4 & 4 \\ -3 & -2 & -1 & 4 & 4 \\ 2 & -1 & -2 & -3 & 3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -1 & -2 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ 2 & 1 & 0 \\ 5 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №86

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -3 & 4 \\ -3 & -8 & 16 \\ -5 & -12 & 33 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 2 & -1 & 2 \\ 5 & -9 & 2 & -7 \\ 3 & -5 & 1 & -5 \\ -4 & 5 & 2 & 4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & -1 & -2 & 5 & -1 \\ -1 & 4 & 4 & -4 & -5 \\ 4 & 2 & 5 & -1 & -3 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 3 & 5 \\ 0 & 1 & -3 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -3 & 1 & 0 \\ 4 & -4 & 1 \end{pmatrix}$$
. Find LU

Вариант №87

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & 3 \\ -2 & -3 & 5 \\ -5 & -8 & 14 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & 5 & 1 & -1 \\ 1 & -6 & 0 & 5 \\ 4 & -15 & -10 & -19 \\ 5 & -20 & -11 & -17 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -4 & -3 & 2 & 5 & -2 \\ -3 & 4 & 1 & 2 & 1 \\ 2 & 4 & -5 & 4 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 2 & 5 \\ 0 & 1 & -2 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ 3 & 1 & 1 \end{pmatrix}$$
. Find LU

Вариант №88

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -2 & -1 \\ -1 & -1 & -6 \\ -4 & -4 & -23 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & -5 & -1 & -2 \\ -1 & 4 & 2 & 5 \\ 2 & -8 & -3 & -11 \\ 2 & -8 & -5 & -10 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 4 & -3 & 5 & 5 & 2 \\ -1 & 5 & -2 & 5 & 3 \\ 3 & 2 & -4 & -4 & -4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & 1 & 4 \\ 0 & 1 & -4 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -2 & 1 & 0 \\ -1 & 5 & 1 \end{pmatrix}$$
. Find LU

Вариант №89

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -1 & 2 \\ 5 & 6 & -9 \\ 1 & 6 & 4 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} -1 & -1 & 1 & 4 \\ 5 & 4 & -3 & -18 \\ 2 & 4 & -5 & -13 \\ 2 & 5 & -10 & -13 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} 5 & 1 & 5 & -3 & -1 \\ 2 & -4 & 3 & 3 & 2 \\ 4 & 5 & -4 & 4 & 4 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 1 & 0 & 0 \\ 0 & 0 & 1 \\ 0 & 1 & 0 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -5 & -1 \\ 0 & 1 & -5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -1 & 1 & 0 \\ 2 & -1 & 1 \end{pmatrix}$$
. Find LU

Вариант №90

None None

Группа БПМИ None

1. Let
$$A = \begin{pmatrix} -1 & -4 & -2 \\ 2 & 9 & -1 \\ -1 & -9 & 24 \end{pmatrix}$$
. Find such B, that $AB = E$

$$A = \begin{pmatrix} 1 & 1 & -1 & 2 \\ -1 & -2 & 2 & -5 \\ -4 & 0 & 1 & -1 \\ 2 & -2 & 1 & -4 \end{pmatrix}$$

3. Let
$$A = \begin{pmatrix} -1 & -5 & 3 & -4 & 2 \\ 3 & -5 & 1 & -5 & 5 \\ -1 & -1 & 5 & 3 & -1 \end{pmatrix}$$
. Find rank of A

4. Let
$$A = \begin{pmatrix} 0 & 1 & 0 \\ 1 & 0 & 0 \\ 0 & 0 & 1 \end{pmatrix}$$
. Which type of elementary matrix is it?

5. Let
$$L = \begin{pmatrix} 1 & -2 & 1 \\ 0 & 1 & 5 \\ 0 & 0 & 1 \end{pmatrix} U = \begin{pmatrix} 1 & 0 & 0 \\ -4 & 1 & 0 \\ -2 & 5 & 1 \end{pmatrix}$$
. Find LU