

### Mustaqil yechish uchun misollar.

Berilgan matritsalar ustida talab qilingan amallarni bajaring.

1.  $A = \begin{bmatrix} 1 & 5 \\ 2 & -4 \end{bmatrix}$ ,  $B = \begin{bmatrix} 3 & 2 \\ 4 & 1 \end{bmatrix}$   $2A - B = ?$       2.  $A = \begin{bmatrix} 1 & -1 & -3 \\ 2 & 1 & 5 \end{bmatrix}$ ,  $B = \begin{bmatrix} 0 & 3 & 2 \\ -1 & 4 & 1 \end{bmatrix}$   $3A -$

$2B = ?$

3.  $\begin{bmatrix} 7 & 0 \\ 3 & 1 \\ -1 & 2 \end{bmatrix} - 3 \begin{bmatrix} 2 & \sqrt{2} \\ 1 & -1 \\ -1 & 0 \end{bmatrix} + \begin{bmatrix} 1 & \sqrt{18} \\ 4 & -5 \\ 3 & 1 \end{bmatrix}$

4.  $C = (1 \ 2 \ 3)$ ,  $F = \begin{bmatrix} 4 & -3 \\ 1 & 2 \\ 0 & 2 \end{bmatrix}$   $C * F = ?$

5.  $A = \begin{bmatrix} 2 & 1 & -1 \\ 0 & 1 & 0 \\ 0 & 0 & -1 \end{bmatrix}$ ,  $B = \begin{bmatrix} 1 & -1 \\ 0 & 1 \\ 1 & 0 \end{bmatrix}$   $A * B = ?$       6.  $A = \begin{bmatrix} 1 & -1 & 2 \\ 2 & 3 & 4 \\ -4 & 5 & 1 \end{bmatrix}$ ,  $B = \begin{bmatrix} 3 & 4 & 1 \\ 0 & 2 & 5 \\ 1 & -1 & 4 \end{bmatrix}$   $A * B = ?$

7.  $A = \begin{bmatrix} 3 & 2 \\ 1 & 4 \end{bmatrix}$ ,  $A^2 = ?$       8.  $A = \begin{bmatrix} 1 & 1 & 2 \\ 1 & 3 & 1 \\ 4 & 1 & 1 \end{bmatrix}$ ,  $E$ -birlik matritsa  $2A^2 + 3A + 5E$

$= ?$

9.  $A = \begin{bmatrix} 3 & 4 & 2 \\ 1 & 0 & 5 \end{bmatrix}$ ,  $B = \begin{bmatrix} 2 & 0 \\ 1 & 3 \\ 0 & 5 \end{bmatrix}$ ,  $C = \begin{bmatrix} 1 & 3 \\ 0 & 4 \end{bmatrix}$   $A * B - C^2 = ?$

10.  $A = \begin{bmatrix} 1 & 2 & -3 \\ 1 & 0 & 2 \\ 4 & 5 & 3 \end{bmatrix}$ ,  $B = \begin{bmatrix} 1 \\ 2 \\ 1 \end{bmatrix}$ ,  $C = (2 \ 0 \ 5)$ ,  $E$ -birlik matritsa  $A * B * C - 3E = ?$

11.  $A = \begin{pmatrix} 2 & 0 & 1 \\ -2 & 3 & 2 \\ 4 & -1 & 5 \end{pmatrix}$ ,  $B = \begin{pmatrix} -3 & 1 & 0 \\ 0 & 2 & 1 \\ 0 & -1 & 3 \end{pmatrix}$   $A * B = ?$       12.  $\begin{pmatrix} 1 & -3 & 2 \\ 3 & -4 & 1 \\ 2 & -5 & 3 \end{pmatrix} * \begin{pmatrix} 2 & 5 & 6 \\ 1 & 2 & 5 \\ 1 & 3 & 2 \end{pmatrix} = ?$

13.  $\begin{pmatrix} 2 & -1 & 3 & -4 \\ 3 & -2 & 4 & -3 \\ 5 & -3 & -2 & 1 \\ 3 & -3 & -1 & 2 \end{pmatrix} * \begin{pmatrix} 7 & 8 & 6 & 9 \\ 5 & 7 & 4 & 5 \\ 3 & 4 & 5 & 6 \\ 2 & 1 & 1 & 2 \end{pmatrix} = ?$

$$14. \begin{pmatrix} 5 & 7 & -3 & -4 \\ 7 & 6 & -4 & -5 \\ 6 & 4 & -3 & -2 \\ 8 & 5 & -6 & -1 \end{pmatrix} * \begin{pmatrix} 1 & 2 & 3 & 4 \\ 2 & 3 & 4 & 5 \\ 1 & 3 & 5 & 7 \\ 2 & 4 & 6 & 8 \end{pmatrix} = ?$$

Matritsalar ustida amallarni bajaring:

$$1. A = \begin{pmatrix} 3 & 5 \\ 4 & 1 \end{pmatrix}, \quad B = \begin{pmatrix} 2 & 3 \\ 1 & -2 \end{pmatrix} \quad 2A + 5B = ?$$

$$2. A = \begin{pmatrix} 3 & 5 & 7 \\ 2 & -1 & 0 \\ 4 & 3 & 2 \end{pmatrix}, \quad B = \begin{pmatrix} 1 & 2 & 4 \\ 2 & 3 & -2 \\ -1 & 0 & 1 \end{pmatrix} \quad A + B = ?$$

$$3. A = \begin{pmatrix} 1 & -1 & 3 \\ 2 & 1 & 5 \end{pmatrix}, \quad C = \begin{pmatrix} 1 \\ 2 \\ 3 \end{pmatrix} \quad A * C = ?$$

$$4. A = \begin{pmatrix} 1 & 3 & -1 \\ 2 & 1 & 2 \\ 0 & 1 & 0 \end{pmatrix}, \quad F = \begin{pmatrix} 1 & 1 \\ 2 & 3 \\ 1 & 0 \end{pmatrix} \quad A * F = ?$$

$$5. A = \begin{pmatrix} 4 & 3 \\ 2 & 1 \end{pmatrix}, \quad B = \begin{pmatrix} 5 & 7 \\ -1 & 2 \end{pmatrix} \quad A^2 - A * B + 2BA = ?$$

$$6. A = \begin{pmatrix} 1 & -3 & 0 \\ 2 & 5 & 1 \end{pmatrix}, \quad B = \begin{pmatrix} 0 & -1 & 3 \\ 3 & 5 & 2 \\ 4 & -2 & 1 \end{pmatrix} \quad A * B = ?$$

$$7. A = \begin{pmatrix} 1 & 3 & 1 \\ 2 & 0 & 4 \\ 1 & 2 & 3 \end{pmatrix}, \quad B = \begin{pmatrix} 2 & 1 & 0 \\ 1 & -1 & 2 \\ 3 & 2 & 1 \end{pmatrix} \quad A * B = ? \quad B * A = ?$$

$$8. A = \begin{pmatrix} 2 & 1 & 1 \\ 1 & 2 & 1 \\ 1 & 1 & 2 \end{pmatrix} \quad A^2 + A + E = ?$$

$$9. A = \begin{pmatrix} 4 & 3 \\ 7 & 5 \end{pmatrix}, \quad B = \begin{pmatrix} -28 & 93 \\ 38 & -126 \end{pmatrix}, \quad C = \begin{pmatrix} 7 & 3 \\ 2 & 1 \end{pmatrix} \quad A * B * C = ?$$

$$10. \begin{pmatrix} 1 & 3 \\ 2 & 0 \\ 1 & -1 \end{pmatrix} * \begin{pmatrix} 1 & -2 & 3 \\ 5 & 4 & 0 \end{pmatrix} + \begin{pmatrix} -10 & -9 & 7 \\ 1 & 5 & 8 \\ -1 & -3 & 6 \end{pmatrix} = ?$$

$$11. \begin{pmatrix} 5 & 8 & -4 \\ 6 & 9 & -5 \\ 4 & 7 & -3 \end{pmatrix} * \begin{pmatrix} 3 & 2 & 5 \\ 4 & -1 & 3 \\ 9 & 6 & 5 \end{pmatrix} = ?$$

$$12. \begin{pmatrix} 4 & 3 \\ 7 & 5 \end{pmatrix} * \begin{pmatrix} -28 & 93 \\ 38 & -126 \end{pmatrix} * \begin{pmatrix} 7 & 3 \\ 2 & 1 \end{pmatrix} = ?$$

$$13. \begin{pmatrix} 5 & 2 & -2 & 3 \\ 6 & 4 & -3 & 5 \\ 9 & 2 & -3 & 4 \\ 7 & 6 & -4 & 7 \end{pmatrix} * \begin{pmatrix} 2 & 2 & 2 & 2 \\ -1 & -5 & 3 & 11 \\ 16 & 24 & 8 & -8 \\ 8 & 16 & 0 & -16 \end{pmatrix} = ?$$

$$14. \begin{pmatrix} 1 & 1 & 1 & -1 \\ -5 & -3 & -4 & 4 \\ 5 & 1 & 4 & -3 \\ -16 & -11 & -15 & 14 \end{pmatrix} * \begin{pmatrix} 7 & -2 & 3 & 4 \\ 11 & 0 & 3 & 4 \\ 5 & 4 & 3 & 0 \\ 22 & 2 & 9 & 8 \end{pmatrix} = ?^1$$

**Jane S Paterson, Dorothy A Watson "SQA Advanced Higher Mathematics"  
pp.173-182**

---

<sup>1</sup>Jane S Paterson, Dorothy A Watson "SQA Advanced Higher Mathematics" pp.173-182