

# Unimodular Integer Matrices of Order 4 and their Inverses

## Part I

*Remark.* This part corresponds to the file collection UM4-1-1\*.\*, the parts II and III correspond to the file collections UM4-1-2\*.\* and UM4-1-3\*.\*. If  $\mathbb{A}$  and  $\mathbb{B}$  are matrices from two different examples chosen arbitrarily from the parts I, II and III, then  $\mathbb{A}$  differs from  $\mathbb{B}$ ,  $\mathbb{B}^{-1}$ ,  $\mathbb{B}^T$ ,  $\mathbb{B}^{-T}$  and from any matrix that can be obtained from some of these four matrices by a finite sequence of the following operations: permutation of rows, permutation of columns, multiplication of some rows and some columns by  $-1$ .

1.

$$\begin{pmatrix} 5 & 3 & 1 & 1 \\ 8 & 5 & 2 & 2 \\ 14 & 7 & 2 & 1 \\ 8 & 3 & 1 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -1 & -1 & 1 \\ -4 & 1 & 2 & -2 \\ -12 & 5 & 2 & -1 \\ 10 & -3 & -3 & 2 \end{pmatrix}$$

2.

$$\begin{pmatrix} 0 & 3 & 2 & 1 \\ 0 & 2 & 1 & 1 \\ 1 & 8 & 7 & 2 \\ 5 & 6 & 10 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & -2 & -4 & 1 \\ 15 & -5 & -5 & 1 \\ -14 & 4 & 5 & -1 \\ -16 & 7 & 5 & -1 \end{pmatrix}$$

3.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 2 \\ 1 & 0 & 2 & 3 \\ -3 & -4 & 7 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -11 & 4 & 0 & 1 \\ 1 & 1 & -1 & 0 \\ -8 & 4 & -1 & 1 \\ 9 & -4 & 1 & -1 \end{pmatrix}$$

4.

$$\begin{pmatrix} 1 & 1 & 0 & -2 \\ 1 & -1 & 1 & 5 \\ 3 & 0 & 1 & 4 \\ 10 & 4 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & 2 & 1 & -1 \\ -19 & -8 & -1 & 3 \\ 10 & 6 & -2 & -1 \\ -7 & -3 & 0 & 1 \end{pmatrix}$$

5.

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

6.

$$\begin{pmatrix} 2 & 2 & 1 & 0 \\ 1 & 1 & 1 & 0 \\ 0 & 2 & -1 & -1 \\ 10 & 7 & 5 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 1 & 1 & 1 \\ 6 & -2 & -1 & -1 \\ -1 & 2 & 0 & 0 \\ 13 & -6 & -3 & -2 \end{pmatrix}$$

7.

$$\begin{pmatrix} 1 & 1 & 2 & 3 \\ 3 & 2 & 6 & 7 \\ 2 & 2 & 3 & 7 \\ -2 & -2 & -5 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} -18 & 1 & 5 & -3 \\ -5 & -1 & 2 & -2 \\ 6 & 0 & -2 & 1 \\ 4 & 0 & -1 & 1 \end{pmatrix}$$

8.

$$\begin{pmatrix} 2 & 4 & 1 & 1 \\ 7 & 13 & 4 & 4 \\ 6 & 11 & 3 & 2 \\ -1 & -2 & -2 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 8 & -6 & 3 \\ 4 & -3 & 2 & -1 \\ 2 & -7 & 7 & -3 \\ -1 & 3 & -3 & 1 \end{pmatrix}$$

9.

$$\begin{pmatrix} 2 & 1 & 2 & 3 \\ 3 & 2 & 4 & 6 \\ 5 & 2 & 6 & 9 \\ 2 & -1 & -1 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -1 & 0 & 0 \\ 1 & 1 & -1 & 0 \\ 13 & -10 & 2 & -3 \\ -10 & 7 & -1 & 2 \end{pmatrix}$$

10.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & 1 & 0 & 2 \\ 2 & 3 & 2 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & 2 & -7 & -1 \\ -6 & -2 & 6 & 1 \\ -1 & 1 & 0 & 0 \\ -1 & 0 & 1 & 0 \end{pmatrix}$$

11.

$$\begin{pmatrix} 1 & 2 & 2 & 1 \\ -1 & 1 & 0 & 0 \\ 6 & 1 & 4 & 4 \\ 7 & 0 & 3 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & -15 & -9 & 4 \\ 12 & -14 & -9 & 4 \\ -14 & 17 & 11 & -5 \\ -7 & 9 & 5 & -2 \end{pmatrix}$$

12.

$$\begin{pmatrix} 2 & 2 & 1 & 1 \\ -1 & -3 & -2 & 3 \\ 7 & 8 & 4 & 2 \\ 6 & 4 & 1 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & 4 & 3 & -2 \\ -7 & -1 & 1 & 1 \\ 16 & -4 & -6 & 1 \\ 3 & -2 & -2 & 1 \end{pmatrix}$$

13.

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

14.

$$\begin{pmatrix} 2 & 3 & 1 & 1 \\ 1 & -1 & 1 & 2 \\ 8 & 7 & 6 & 7 \\ 6 & 2 & 5 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -9 & -5 & 7 \\ -1 & 4 & 2 & -3 \\ -3 & -2 & 1 & 0 \\ -1 & 8 & 3 & -5 \end{pmatrix}$$

15.

$$\begin{pmatrix} 3 & 3 & 2 & 1 \\ 7 & 5 & 7 & -1 \\ 3 & 5 & 0 & 4 \\ 7 & 8 & 3 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -3 & -4 & 1 \\ -19 & 5 & 5 & 1 \\ 7 & -1 & 0 & -2 \\ 17 & -4 & -3 & -2 \end{pmatrix}$$

16.

$$\begin{pmatrix} 2 & 2 & 1 & 1 \\ 0 & -5 & -2 & 0 \\ 2 & 4 & 2 & 1 \\ 1 & 8 & 4 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & 0 & -4 & 1 \\ 2 & -1 & -2 & 0 \\ -5 & 2 & 5 & 0 \\ -6 & 0 & 7 & -2 \end{pmatrix}$$

17.

$$\begin{pmatrix} 1 & 2 & 2 & 1 \\ 3 & 7 & 8 & 3 \\ 0 & -1 & -1 & -1 \\ 4 & 12 & 15 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & -3 & 3 & 1 \\ -7 & 5 & -4 & -2 \\ 2 & -2 & 2 & 1 \\ 5 & -3 & 1 & 1 \end{pmatrix}$$

18.

$$\begin{pmatrix} 1 & 1 & 3 & 1 \\ -2 & -1 & -3 & 0 \\ 2 & 3 & 10 & 5 \\ 4 & 3 & 8 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & -1 & 1 & 1 \\ 8 & 4 & -2 & 1 \\ 2 & -1 & 0 & -1 \\ -6 & 0 & 1 & 1 \end{pmatrix}$$

19.

$$\begin{pmatrix} 0 & 0 & 1 & -1 \\ 1 & 1 & 0 & 4 \\ 5 & 2 & 6 & 7 \\ 6 & 1 & 8 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & 11 & -8 & 5 \\ 16 & 18 & -12 & 7 \\ -5 & -7 & 5 & -3 \\ -6 & -7 & 5 & -3 \end{pmatrix}$$

20.

$$\begin{pmatrix} 1 & 0 & 0 & 1 \\ 1 & 4 & 1 & 3 \\ -1 & 5 & 2 & 2 \\ 5 & 7 & -1 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & 19 & -11 & -3 \\ -6 & 7 & -4 & -1 \\ -7 & 11 & -6 & -2 \\ 15 & -19 & 11 & 3 \end{pmatrix}$$

21.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 0 & 1 & 0 & 1 \\ -6 & 2 & 1 & 1 \\ -8 & 12 & 3 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & 0 & 0 \\ 10 & -3 & 3 & -1 \\ -4 & -4 & -2 & 1 \\ -10 & 4 & -3 & 1 \end{pmatrix}$$

22.

$$\begin{pmatrix} 1 & 0 & -1 & 1 \\ 5 & 1 & -4 & 5 \\ 1 & 4 & 3 & 2 \\ 3 & 6 & 2 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 2 & 1 & -1 \\ -16 & 3 & -2 & 1 \\ 11 & -2 & 2 & -1 \\ 19 & -4 & 1 & 0 \end{pmatrix}$$

23.

$$\begin{pmatrix} 4 & 3 & 0 & 1 \\ 1 & 3 & 2 & -2 \\ 7 & 4 & -1 & 3 \\ 9 & 12 & 4 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 2 & 0 & -1 \\ 2 & -3 & -2 & 1 \\ -17 & 5 & 9 & 0 \\ -13 & 1 & 6 & 1 \end{pmatrix}$$

24.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ -1 & 1 & 1 & 3 \\ 2 & 5 & 6 & 5 \\ 10 & 6 & 9 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & 19 & -9 & 3 \\ -1 & -11 & 5 & -2 \\ -6 & -8 & 4 & -1 \\ 5 & 13 & -6 & 2 \end{pmatrix}$$

25.

$$\begin{pmatrix} -2 & 0 & 1 & -3 \\ 3 & 1 & 1 & 1 \\ 6 & 5 & 7 & -5 \\ 7 & 2 & 2 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 13 & -1 & -4 \\ -3 & -4 & 1 & 0 \\ -1 & -19 & 1 & 7 \\ -2 & -15 & 1 & 5 \end{pmatrix}$$

26.

$$\begin{pmatrix} 0 & 1 & 3 & 4 \\ 1 & 1 & 1 & 1 \\ 3 & 5 & 7 & 6 \\ 6 & 8 & 7 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -11 & -2 & 9 & -4 \\ 19 & 6 & -16 & 7 \\ -14 & -6 & 12 & -5 \\ 6 & 3 & -5 & 2 \end{pmatrix}$$

27.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 1 & 3 & 1 & 2 \\ 3 & 5 & 4 & 4 \\ 3 & 3 & 6 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & -14 & 8 & -3 \\ -5 & 6 & -3 & 1 \\ -8 & 9 & -5 & 2 \\ 6 & -6 & 3 & -1 \end{pmatrix}$$

28.

$$\begin{pmatrix} 2 & 2 & 1 & 2 \\ 3 & 4 & 2 & 3 \\ -1 & -1 & 0 & -1 \\ 6 & 7 & 3 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & 0 & -1 & -1 \\ -2 & 1 & -1 & 0 \\ 1 & 0 & 2 & 0 \\ -1 & -1 & 1 & 1 \end{pmatrix}$$

29.

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

30.

$$\begin{pmatrix} 3 & 0 & 3 & 2 \\ 7 & 1 & 8 & 4 \\ 9 & -1 & 8 & 7 \\ 9 & 2 & 10 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 18 & -5 & -3 & 1 \\ -6 & 0 & 1 & 1 \\ -7 & 3 & 1 & -1 \\ -16 & 3 & 3 & 0 \end{pmatrix}$$

31.

$$\begin{pmatrix} 1 & -1 & 1 & 0 \\ 1 & 2 & 2 & 2 \\ 7 & -4 & 8 & 3 \\ 10 & 0 & 13 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & -11 & -2 & 4 \\ -1 & -2 & -1 & 1 \\ 14 & 9 & 1 & -3 \\ -6 & -1 & 1 & 0 \end{pmatrix}$$

32.

$$\begin{pmatrix} 1 & 1 & 2 & 1 \\ 4 & 4 & 7 & 4 \\ 5 & 4 & 10 & 4 \\ -8 & -7 & -17 & -8 \end{pmatrix}^{-1} = \begin{pmatrix} -12 & 2 & 1 & 0 \\ 12 & -1 & 0 & 1 \\ 4 & -1 & 0 & 0 \\ -7 & 1 & -1 & -1 \end{pmatrix}$$

33.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ -1 & 0 & 1 & 0 \\ 0 & 2 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & 2 & 1 & -1 \\ -1 & -1 & -1 & 1 \\ 0 & 2 & 2 & -1 \\ 1 & -2 & -2 & 1 \end{pmatrix}$$

34.

$$\begin{pmatrix} 0 & 1 & 1 & 2 \\ 1 & 2 & 1 & 3 \\ 2 & 1 & 0 & 1 \\ 6 & 1 & -6 & -6 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & 1 & 0 \\ 12 & -6 & 0 & 1 \\ 17 & -10 & 2 & 1 \\ -14 & 8 & -1 & -1 \end{pmatrix}$$

35.

$$\begin{pmatrix} 1 & 0 & 0 & 3 \\ 2 & -1 & 1 & 4 \\ 1 & 1 & 0 & 2 \\ 7 & 1 & 1 & 16 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & -3 & -6 & 3 \\ 2 & 1 & 3 & -1 \\ 6 & 4 & 7 & -3 \\ 3 & 1 & 2 & -1 \end{pmatrix}$$

36.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 2 & 1 & 0 & 0 \\ 3 & 2 & 1 & 2 \\ 6 & 3 & 1 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & -1 & -1 & 1 \\ 0 & 3 & 2 & -2 \\ 2 & 3 & 0 & -1 \\ -1 & -3 & 0 & 1 \end{pmatrix}$$

37.

$$\begin{pmatrix} 2 & 1 & 1 & 0 \\ 1 & -1 & 3 & 3 \\ 7 & 2 & 6 & 2 \\ 4 & 3 & 0 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -12 & 2 & 1 & 4 \\ 18 & -2 & -2 & -5 \\ 7 & -2 & 0 & -3 \\ 3 & 1 & -1 & 0 \end{pmatrix}$$

38.

$$\begin{pmatrix} 5 & 0 & 1 & 1 \\ 11 & 0 & 2 & 2 \\ 11 & 1 & 2 & 2 \\ 12 & -2 & 1 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & 1 & 0 & 0 \\ 0 & -1 & 1 & 0 \\ -2 & 4 & -2 & -1 \\ 13 & -9 & 2 & 1 \end{pmatrix}$$

39.

$$\begin{pmatrix} 2 & 0 & 1 & 1 \\ 7 & 1 & 3 & 4 \\ 8 & 1 & 3 & 6 \\ 2 & -2 & 0 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -12 & 11 & -7 & 2 \\ 3 & -4 & 3 & -1 \\ 19 & -16 & 10 & -3 \\ 6 & -6 & 4 & -1 \end{pmatrix}$$

40.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 1 & 0 & -1 & 1 \\ 2 & 8 & -1 & 9 \\ 1 & 12 & 1 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & -1 & 1 & 0 \\ 5 & 3 & -2 & 1 \\ -12 & -5 & 3 & -1 \\ -4 & -3 & 2 & -1 \end{pmatrix}$$

41.

$$\begin{pmatrix} 1 & 2 & 1 & 2 \\ 2 & 2 & 3 & 3 \\ 3 & 5 & 3 & 5 \\ -1 & -5 & -1 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & 1 & 1 \\ -7 & 0 & 2 & -1 \\ -6 & 1 & 1 & -1 \\ 10 & 0 & -3 & 1 \end{pmatrix}$$

42.

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

43.

$$\begin{pmatrix} 3 & 3 & 2 & 3 \\ 14 & 12 & 9 & 13 \\ 6 & 3 & 5 & 4 \\ -1 & 2 & -2 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & -1 & 7 & 6 \\ -1 & -2 & 6 & 5 \\ 5 & 0 & -3 & -3 \\ 5 & 3 & -11 & -9 \end{pmatrix}$$

44.

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

45.

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

46.

$$\begin{pmatrix} 2 & 2 & 0 & 3 \\ 1 & 0 & 1 & 1 \\ 2 & 4 & -3 & 3 \\ 8 & 7 & 1 & 12 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & 3 & 1 & 0 \\ 13 & 0 & -1 & -3 \\ 9 & 0 & -1 & -2 \\ -7 & -2 & 0 & 2 \end{pmatrix}$$

47.

$$\begin{pmatrix} 1 & 1 & 4 & 2 \\ 1 & 2 & 7 & 3 \\ 6 & 2 & 9 & 6 \\ 7 & 2 & 9 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & 0 & -1 & 1 \\ -15 & 6 & 5 & -3 \\ 6 & -2 & -3 & 2 \\ -4 & 1 & 4 & -3 \end{pmatrix}$$

48.

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

49.

$$\begin{pmatrix} 1 & 1 & 0 & 2 \\ 1 & 1 & 0 & 1 \\ 8 & 7 & 1 & 10 \\ 4 & 4 & 1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 0 & 1 & -1 \\ 2 & 2 & -1 & 1 \\ 0 & -4 & 0 & 1 \\ 1 & -1 & 0 & 0 \end{pmatrix}$$

50.

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

51.

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

52.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 5 & 2 & 6 & 1 \\ 6 & 2 & 7 & 0 \\ -4 & 1 & -5 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -13 & -10 & 14 & 5 \\ 4 & 2 & -3 & -1 \\ 10 & 8 & -11 & -4 \\ -3 & -1 & 2 & 1 \end{pmatrix}$$

53.

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

54.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 0 & 0 & 3 & 2 \\ 3 & 1 & 0 & 1 \\ 7 & 2 & -2 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 3 & -2 & 1 \\ 18 & -8 & 7 & -3 \\ -2 & 1 & 0 & 0 \\ 3 & -1 & 0 & 0 \end{pmatrix}$$

55.

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

56.

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

57.

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

58.

$$\begin{pmatrix} 3 & 1 & 0 & 1 \\ 5 & 2 & 0 & 1 \\ 0 & 1 & 1 & 0 \\ 14 & 6 & -1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 6 & -1 & -1 \\ 9 & -11 & 2 & 2 \\ -9 & 11 & -1 & -2 \\ 7 & -7 & 1 & 1 \end{pmatrix}$$

59.

$$\begin{pmatrix} 0 & 2 & 3 & 0 \\ 0 & 5 & 7 & 0 \\ 1 & 8 & 10 & 1 \\ 2 & -5 & -11 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 14 & -3 & -1 & 1 \\ -7 & 3 & 0 & 0 \\ 5 & -2 & 0 & 0 \\ -8 & -1 & 2 & -1 \end{pmatrix}$$

60.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ -1 & 1 & 3 & -3 \\ 1 & 2 & 4 & 1 \\ 0 & 1 & 0 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 13 & 5 & -7 & 9 \\ 7 & 3 & -4 & 6 \\ -5 & -2 & 3 & -4 \\ -7 & -3 & 4 & -5 \end{pmatrix}$$

61.

$$\begin{pmatrix} 2 & 0 & 1 & 1 \\ 5 & 1 & 3 & 3 \\ 3 & 3 & 3 & 2 \\ -1 & 0 & 0 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 3 & -1 & -1 \\ -9 & 4 & -1 & -1 \\ 19 & -9 & 3 & 2 \\ -6 & 3 & -1 & 0 \end{pmatrix}$$

62.

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

63.

$$\begin{pmatrix} 0 & 1 & 1 & 0 \\ 2 & 6 & 2 & 1 \\ 2 & 4 & -1 & 1 \\ 5 & 7 & -3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -15 & 5 & -2 & -1 \\ 3 & -1 & 1 & 0 \\ -2 & 1 & -1 & 0 \\ 16 & -5 & 0 & 2 \end{pmatrix}$$

64.

$$\begin{pmatrix} -1 & 0 & 0 & 1 \\ -1 & 1 & 0 & 2 \\ 3 & 4 & 1 & 1 \\ 6 & 14 & 3 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & 2 & 3 & -1 \\ -2 & -1 & -3 & 1 \\ 7 & -4 & 1 & 0 \\ 1 & 2 & 3 & -1 \end{pmatrix}$$

65.

$$\begin{pmatrix} 2 & 1 & -1 & 1 \\ 4 & 3 & 0 & 1 \\ 2 & 3 & 4 & -2 \\ 19 & 16 & 7 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -3 & -2 & 1 \\ 6 & 4 & 5 & -2 \\ -11 & -1 & -6 & 2 \\ -14 & 1 & -7 & 2 \end{pmatrix}$$

66.

$$\begin{pmatrix} 0 & 3 & 2 & 2 \\ 1 & 0 & 1 & 1 \\ 2 & -5 & -1 & 0 \\ 2 & -2 & 2 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 13 & -11 & 9 & -3 \\ 9 & -8 & 6 & -2 \\ -19 & 18 & -13 & 4 \\ 6 & -6 & 4 & -1 \end{pmatrix}$$

67.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 3 & 2 & 4 & 3 \\ 9 & 2 & 11 & 3 \\ -3 & 2 & -4 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & -6 & 6 & 7 \\ 15 & 4 & -5 & -6 \\ 12 & 5 & -5 & -6 \\ -12 & -3 & 4 & 5 \end{pmatrix}$$

68.

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

69.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 0 & -1 & 0 & -1 \\ 3 & 1 & 1 & 4 \\ 10 & 10 & 5 & 18 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & -15 & 8 & -3 \\ 5 & -11 & 5 & -2 \\ -6 & 16 & -8 & 3 \\ -5 & 10 & -5 & 2 \end{pmatrix}$$

70.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 2 & 4 & 4 & 5 \\ 3 & 2 & 2 & 3 \\ 4 & -1 & -2 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -1 & 1 & 0 \\ 10 & -2 & 0 & 1 \\ -1 & -1 & 2 & -1 \\ -8 & 3 & -2 & 0 \end{pmatrix}$$

71.

$$\begin{pmatrix} 2 & 2 & 2 & 1 \\ 5 & 6 & 5 & 3 \\ 3 & -3 & 2 & -2 \\ 3 & 8 & 4 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 4 & 0 & -1 \\ -8 & 2 & 1 & 1 \\ 11 & -5 & 0 & 1 \\ 11 & -2 & -2 & -2 \end{pmatrix}$$

72.

$$\begin{pmatrix} 3 & 0 & 1 & 3 \\ 10 & 2 & 5 & 9 \\ 8 & 3 & 4 & 7 \\ 5 & -2 & 2 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & -13 & 14 & 8 \\ 1 & 1 & -1 & -1 \\ 1 & 6 & -6 & -3 \\ 7 & 11 & -12 & -7 \end{pmatrix}$$

73.

$$\begin{pmatrix} 2 & 1 & 1 & 2 \\ 3 & 1 & 3 & 3 \\ 2 & 1 & 2 & 2 \\ 7 & -2 & 5 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -10 & 13 & 1 \\ 0 & -2 & 3 & 0 \\ -1 & 0 & 1 & 0 \\ 2 & 11 & -15 & -1 \end{pmatrix}$$

74.

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

75.

$$\begin{pmatrix} 4 & 3 & 3 & 2 \\ -1 & 0 & 0 & -1 \\ 6 & 7 & 7 & 1 \\ 11 & 9 & 10 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & -11 & 3 & 0 \\ 8 & 9 & -2 & -1 \\ -3 & -1 & 0 & 1 \\ 7 & 10 & -3 & 0 \end{pmatrix}$$

76.

$$\begin{pmatrix} 1 & 0 & 2 & 2 \\ 2 & -1 & 6 & 5 \\ 1 & -4 & 5 & 3 \\ 4 & 2 & 7 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 19 & 0 & -2 & -4 \\ 3 & 1 & -1 & -1 \\ 10 & 2 & -2 & -3 \\ -19 & -2 & 3 & 5 \end{pmatrix}$$



77.

$$\begin{pmatrix} 4 & 1 & 3 & 2 \\ 7 & 1 & 5 & 4 \\ 5 & 1 & 4 & 3 \\ 12 & -4 & 7 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & 1 & -2 & 0 \\ -11 & 8 & 0 & -1 \\ 12 & -10 & 2 & 1 \\ -14 & 9 & 1 & -1 \end{pmatrix}$$

78.

$$\begin{pmatrix} 0 & 1 & 3 & 1 \\ -1 & 0 & 1 & 2 \\ -3 & 1 & 5 & 6 \\ 0 & 2 & 10 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & 14 & -5 & -1 \\ 10 & 15 & -5 & -2 \\ -5 & -9 & 3 & 1 \\ 6 & 12 & -4 & -1 \end{pmatrix}$$

79.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 & 0 & 3 \\ -1 & -4 & -7 & 1 \\ 2 & 2 & 1 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 15 & -5 & 2 & -1 \\ -9 & 2 & -1 & 2 \\ 2 & 0 & 0 & -1 \\ -7 & 3 & -1 & 0 \end{pmatrix}$$

80.

$$\begin{pmatrix} 1 & 4 & 2 & 3 \\ 1 & 5 & 3 & 4 \\ 3 & 8 & 1 & 5 \\ -1 & -1 & 1 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 15 & -9 & -2 & -1 \\ -4 & 2 & 1 & 1 \\ 7 & -4 & -1 & 0 \\ -4 & 3 & 0 & -1 \end{pmatrix}$$

81.

$$\begin{pmatrix} 2 & 1 & 2 & 1 \\ 4 & 2 & 5 & 2 \\ 6 & 3 & 6 & 2 \\ 1 & 0 & 4 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & -4 & 4 & 1 \\ 10 & 6 & -7 & -2 \\ -2 & 1 & 0 & 0 \\ 3 & 0 & -1 & 0 \end{pmatrix}$$

82.

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

83.

$$\begin{pmatrix} 1 & 1 & 3 & 2 \\ 1 & 2 & 5 & 3 \\ 1 & 1 & 6 & 3 \\ -2 & 4 & -1 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} -9 & 11 & -5 & -2 \\ -6 & 7 & -3 & -1 \\ -6 & 6 & -2 & -1 \\ 17 & -18 & 7 & 3 \end{pmatrix}$$

84.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 4 & 3 & 4 & 4 \\ 3 & 1 & 4 & 4 \\ 3 & 3 & 5 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 3 & -1 & 0 \\ 4 & -1 & 0 & 0 \\ -8 & 2 & -1 & 1 \\ 13 & -4 & 2 & -1 \end{pmatrix}$$

85.

$$\begin{pmatrix} 2 & 2 & 1 & 1 \\ 5 & 6 & -1 & 1 \\ 1 & 1 & 1 & 1 \\ 8 & 11 & -5 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 17 & -7 & -14 & 2 \\ -16 & 7 & 13 & -2 \\ -6 & 3 & 5 & -1 \\ 5 & -3 & -3 & 1 \end{pmatrix}$$

86.

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

87.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 1 & 0 & 0 & 2 \\ -1 & -2 & -2 & 1 \\ 2 & 3 & 4 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 3 & -2 & 0 \\ 18 & -9 & 7 & -1 \\ -15 & 7 & -6 & 1 \\ 2 & -1 & 1 & 0 \end{pmatrix}$$

88.

$$\begin{pmatrix} 2 & 5 & 2 & 0 \\ 2 & 6 & 3 & -1 \\ 6 & 17 & 9 & -2 \\ 3 & 10 & 5 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 12 & -1 & -5 \\ 1 & -4 & 0 & 2 \\ -1 & -2 & 1 & 0 \\ 1 & -7 & 1 & 2 \end{pmatrix}$$

89.

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

90.

$$\begin{pmatrix} 1 & -1 & -1 & 2 \\ 0 & 1 & 1 & -1 \\ 7 & 2 & 2 & 6 \\ 10 & 9 & 8 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & 10 & -1 & 0 \\ 11 & 9 & -3 & 1 \\ -18 & -17 & 4 & -1 \\ -7 & -9 & 1 & 0 \end{pmatrix}$$

91.

$$\begin{pmatrix} 1 & 3 & 2 & 2 \\ 4 & 3 & 1 & 4 \\ 4 & -4 & -4 & 1 \\ 11 & 2 & -2 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & -10 & 0 & 3 \\ -3 & 0 & -2 & 1 \\ 9 & -7 & 2 & 1 \\ -8 & 12 & 1 & -4 \end{pmatrix}$$

92.

$$\begin{pmatrix} 0 & 3 & 2 & 2 \\ 1 & 0 & 0 & 1 \\ 3 & 1 & -1 & 3 \\ 1 & 8 & 4 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & -6 & 4 & -5 \\ 5 & -4 & 2 & -2 \\ 5 & -1 & 1 & -2 \\ -12 & 7 & -4 & 5 \end{pmatrix}$$

93.

$$\begin{pmatrix} 1 & 2 & 0 & 0 \\ 0 & 2 & 0 & 1 \\ 1 & 2 & 1 & 1 \\ 2 & -5 & 2 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & 8 & -4 & 2 \\ 0 & -4 & 2 & -1 \\ -1 & -9 & 5 & -2 \\ 0 & 9 & -4 & 2 \end{pmatrix}$$

94.

$$\begin{pmatrix} 0 & 2 & 1 & 1 \\ -1 & 4 & 3 & 2 \\ -2 & 12 & 7 & 6 \\ -2 & 5 & 4 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & 1 & -1 & 0 \\ 2 & -2 & 0 & 1 \\ 2 & 2 & -1 & 0 \\ -5 & 2 & 1 & -2 \end{pmatrix}$$

95.

$$\begin{pmatrix} 0 & 3 & 1 & 1 \\ 2 & 5 & 1 & 0 \\ 2 & 10 & 3 & 1 \\ 7 & 9 & 0 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 16 & -5 & -3 \\ 1 & -10 & 3 & 2 \\ -3 & 19 & -5 & -4 \\ 1 & 11 & -4 & -2 \end{pmatrix}$$

96.

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

97.

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

98.

$$\begin{pmatrix} 1 & 1 & 0 & 2 \\ 1 & 0 & 4 & -1 \\ 4 & 4 & 1 & 7 \\ -2 & 1 & -12 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 13 & 10 & -4 & 3 \\ -14 & -4 & 4 & -1 \\ -3 & -3 & 1 & -1 \\ 1 & -3 & 0 & -1 \end{pmatrix}$$

99.

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

100.

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

101.

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

102.

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

103.

$$\begin{pmatrix} 0 & 1 & 0 & -1 \\ 1 & 1 & 2 & 2 \\ 1 & 4 & 3 & 0 \\ 3 & 1 & 3 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & -3 & 1 & 1 \\ 8 & 6 & -3 & -1 \\ -10 & -7 & 4 & 1 \\ 7 & 6 & -3 & -1 \end{pmatrix}$$

104.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 1 & -3 & 0 & 0 \\ 0 & 7 & 3 & 2 \\ 1 & 6 & 4 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & -8 & -6 & 3 \\ 2 & -3 & -2 & 1 \\ -4 & 5 & 3 & -1 \\ -1 & 3 & 3 & -2 \end{pmatrix}$$

105.

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

106.

$$\begin{pmatrix} 0 & 1 & 1 & 0 \\ 0 & 3 & 2 & 1 \\ 1 & 3 & 1 & 2 \\ 1 & 3 & 1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -2 & 1 & 0 \\ -2 & 1 & -1 & 1 \\ 3 & -1 & 1 & -1 \\ 0 & 0 & 1 & -1 \end{pmatrix}$$

107.

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

108.

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

109.

$$\begin{pmatrix} 1 & 3 & 2 & 5 \\ 3 & 10 & 7 & 16 \\ 1 & -3 & -3 & -3 \\ 3 & 4 & 2 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -9 & 3 & 1 & 0 \\ 13 & -2 & 2 & -3 \\ -17 & 4 & -1 & 2 \\ 1 & -1 & -1 & 1 \end{pmatrix}$$

110.

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

111.

$$\begin{pmatrix} 5 & 1 & 2 & 1 \\ 16 & 4 & 7 & 4 \\ 10 & 2 & 5 & 3 \\ -12 & -5 & -3 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & 3 & -4 & 1 \\ -2 & -2 & 3 & -1 \\ 0 & -13 & 16 & -4 \\ -2 & 13 & -15 & 4 \end{pmatrix}$$

112.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 5 & 5 & 3 & 4 \\ 9 & 7 & 6 & 6 \\ 15 & 12 & 11 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 1 & 5 & -3 \\ -6 & 3 & 4 & -3 \\ 2 & -1 & -3 & 2 \\ 11 & -4 & -9 & 6 \end{pmatrix}$$

113.

$$\begin{pmatrix} 3 & 1 & 2 & 1 \\ 9 & 1 & 5 & 5 \\ -1 & 3 & 1 & -4 \\ 4 & 5 & 4 & -3 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 2 & 0 & 1 \\ 18 & -7 & -5 & 1 \\ -5 & 3 & 4 & -2 \\ 14 & -5 & -3 & 0 \end{pmatrix}$$

114.

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

115.

$$\begin{pmatrix} 3 & 0 & 1 & 1 \\ 4 & 0 & 1 & 1 \\ 1 & 1 & 1 & 0 \\ 7 & 4 & 7 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 1 & 0 & 0 \\ -12 & 8 & -3 & 1 \\ 13 & -9 & 4 & -1 \\ -9 & 6 & -4 & 1 \end{pmatrix}$$

116.

$$\begin{pmatrix} 4 & 3 & 4 & 3 \\ 9 & 6 & 9 & 5 \\ 1 & 0 & 2 & 0 \\ -2 & 1 & -4 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 14 & -6 & -13 & -6 \\ -18 & 8 & 14 & 7 \\ -7 & 3 & 7 & 3 \\ 9 & -4 & -6 & -3 \end{pmatrix}$$

117.

$$\begin{pmatrix} 1 & 0 & 2 & 0 \\ 1 & 0 & 1 & 0 \\ 5 & 1 & 7 & 1 \\ -2 & -3 & 2 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 2 & 0 & 0 \\ 8 & 0 & -2 & -1 \\ 1 & -1 & 0 & 0 \\ -10 & -3 & 3 & 1 \end{pmatrix}$$

118.

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 4 & 0 & 3 & -1 \\ 3 & 1 & 4 & 1 \\ 1 & 2 & 1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & -1 & -2 & 1 \\ -7 & 1 & 1 & 0 \\ -9 & 1 & 2 & -1 \\ 13 & -2 & -2 & 1 \end{pmatrix}$$

119.

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

120.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 0 & 1 & 0 \\ -3 & 8 & 4 & 7 \\ 3 & 1 & 4 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -9 & 1 & 1 & 1 \\ -7 & 3 & 1 & 0 \\ 9 & 0 & -1 & -1 \\ -1 & -3 & 0 & 1 \end{pmatrix}$$

121.

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

122.

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

123.

$$\begin{pmatrix} 1 & 3 & 1 & 1 \\ 3 & 8 & 3 & 2 \\ 1 & 5 & 2 & 3 \\ -1 & -4 & -3 & -3 \end{pmatrix}^{-1} = \begin{pmatrix} 19 & -5 & -5 & -2 \\ -7 & 2 & 2 & 1 \\ -7 & 2 & 1 & 0 \\ 10 & -3 & -2 & -1 \end{pmatrix}$$

124.

$$\begin{pmatrix} 1 & 3 & 2 & 2 \\ 5 & 11 & 5 & 6 \\ 1 & 4 & 3 & 3 \\ 1 & 5 & 6 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 1 & -1 & 1 \\ 7 & -1 & -1 & -1 \\ 9 & -1 & -4 & 0 \\ -17 & 2 & 6 & 1 \end{pmatrix}$$

125.

$$\begin{pmatrix} 1 & 1 & 0 & 0 \\ 0 & 0 & -1 & -1 \\ 12 & 11 & 4 & 4 \\ 5 & 3 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -11 & 4 & 1 & 0 \\ 12 & -4 & -1 & 0 \\ 19 & -6 & -2 & 1 \\ -19 & 5 & 2 & -1 \end{pmatrix}$$

126.

$$\begin{pmatrix} 1 & 1 & 1 & 2 \\ 2 & 2 & -1 & 0 \\ 4 & 3 & 1 & 4 \\ 7 & 6 & -4 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -6 & -1 & 2 \\ 2 & 1 & -1 & 0 \\ 10 & -11 & -4 & 4 \\ -7 & 8 & 3 & -3 \end{pmatrix}$$

127.

$$\begin{pmatrix} 1 & 0 & 2 & 1 \\ 1 & 1 & 0 & 1 \\ 2 & -1 & 0 & 3 \\ 6 & -2 & 3 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} -12 & -1 & -17 & 8 \\ 3 & 1 & 4 & -2 \\ 2 & 0 & 2 & -1 \\ 9 & 1 & 13 & -6 \end{pmatrix}$$

128.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 2 & 2 & 1 & 2 \\ 1 & 0 & -3 & 1 \\ 1 & 1 & 7 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 3 & 1 & 1 \\ -7 & 4 & -1 & 0 \\ 2 & -1 & 0 & 0 \\ 13 & -6 & 0 & -1 \end{pmatrix}$$

129.

$$\begin{pmatrix} 2 & 1 & 1 & 0 \\ 6 & 2 & 1 & -2 \\ 7 & 2 & 0 & -3 \\ 3 & 2 & 6 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -8 & 6 & 1 \\ -1 & 13 & -10 & -2 \\ -2 & 3 & -2 & 0 \\ 4 & -10 & 7 & 1 \end{pmatrix}$$

130.

$$\begin{pmatrix} 3 & 1 & 1 & 1 \\ 7 & 0 & 5 & 4 \\ -1 & -4 & 3 & 3 \\ 3 & -6 & 8 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 7 & 9 & -7 \\ 9 & -10 & -13 & 10 \\ 2 & -4 & -7 & 5 \\ 8 & -7 & -7 & 6 \end{pmatrix}$$

131.

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

132.

$$\begin{pmatrix} 3 & -1 & 0 & 2 \\ 0 & 2 & 2 & 1 \\ 0 & 1 & 2 & 1 \\ 8 & 2 & 5 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & 9 & 1 & -4 \\ 0 & 1 & -1 & 0 \\ 8 & 6 & 2 & -3 \\ -16 & -13 & -2 & 6 \end{pmatrix}$$

133.

$$\begin{pmatrix} 0 & 0 & 2 & 1 \\ 0 & 1 & 4 & 2 \\ -1 & 2 & -1 & 0 \\ 1 & 3 & 4 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -3 & 0 & 1 \\ -2 & 1 & 0 & 0 \\ -8 & 5 & -1 & -1 \\ 17 & -10 & 2 & 2 \end{pmatrix}$$

134.

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

135.

$$\begin{pmatrix} 1 & 3 & 1 & 2 \\ 3 & 10 & 4 & 7 \\ 3 & 10 & 3 & 6 \\ -2 & -11 & -1 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & -2 & 4 & 1 \\ -3 & 0 & 1 & 0 \\ -13 & 0 & 5 & 1 \\ 13 & 1 & -6 & -1 \end{pmatrix}$$

136.

$$\begin{pmatrix} 1 & 1 & 1 & 3 \\ 3 & 3 & 2 & 8 \\ 1 & 2 & 0 & 3 \\ 2 & 1 & 0 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & 5 & -2 & -1 \\ -4 & 2 & 0 & -1 \\ -3 & 2 & -1 & -1 \\ 6 & -3 & 1 & 1 \end{pmatrix}$$

137.

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

138.

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

139.

$$\begin{pmatrix} 4 & 1 & 0 & 3 \\ 5 & 1 & 0 & 4 \\ 3 & 2 & -2 & 2 \\ 13 & 1 & 3 & 11 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & 4 & -3 & -2 \\ 0 & -7 & 3 & 2 \\ 1 & -4 & 1 & 1 \\ -5 & -3 & 3 & 2 \end{pmatrix}$$

140.

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

141.

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

142.

$$\begin{pmatrix} 2 & 0 & 1 & 2 \\ 2 & 2 & 1 & 1 \\ 13 & -6 & 6 & 16 \\ 4 & -1 & 2 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & 4 & 1 & 2 \\ 2 & 0 & 0 & -1 \\ 19 & -6 & -2 & 0 \\ 5 & -1 & 0 & -2 \end{pmatrix}$$

143.

$$\begin{pmatrix} 2 & 0 & 0 & -1 \\ 2 & 2 & 1 & 0 \\ 1 & 3 & 2 & 0 \\ 4 & 7 & 6 & -3 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 4 & -5 & 1 \\ 9 & -10 & 14 & -3 \\ -12 & 13 & -18 & 4 \\ -7 & 8 & -10 & 2 \end{pmatrix}$$

144.

$$\begin{pmatrix} 0 & 0 & 1 & 2 \\ 0 & 0 & 1 & 1 \\ 1 & -2 & 4 & 9 \\ 3 & -7 & 1 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -19 & -7 & 7 & -2 \\ -7 & -4 & 3 & -1 \\ -1 & 2 & 0 & 0 \\ 1 & -1 & 0 & 0 \end{pmatrix}$$

145.

$$\begin{pmatrix} 0 & 1 & 2 & 1 \\ -1 & 1 & 0 & 1 \\ 1 & 0 & 3 & 1 \\ 3 & 0 & 6 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 3 & -2 & 2 \\ 0 & 1 & -2 & 1 \\ 2 & -2 & 1 & -1 \\ -3 & 3 & 0 & 1 \end{pmatrix}$$

146.

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

147.

$$\begin{pmatrix} -1 & -1 & 0 & 0 \\ 2 & 2 & 2 & 1 \\ 7 & 5 & 3 & 2 \\ 12 & 9 & 5 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -1 & -1 & 1 \\ -3 & 1 & 1 & -1 \\ 3 & 0 & -3 & 2 \\ -4 & 1 & 6 & -4 \end{pmatrix}$$

148.

$$\begin{pmatrix} 1 & 0 & 2 & 3 \\ 5 & -2 & 6 & 8 \\ 4 & -1 & 6 & 8 \\ 3 & 0 & 5 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & -3 & 6 & 2 \\ -14 & -4 & 7 & 2 \\ 3 & 0 & 0 & -1 \\ 3 & 1 & -2 & 0 \end{pmatrix}$$

149.

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

150.

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

151.

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

152.

$$\begin{pmatrix} 3 & 3 & 1 & 3 \\ 10 & 10 & 3 & 10 \\ 10 & 11 & 3 & 10 \\ 11 & 7 & 2 & 12 \end{pmatrix}^{-1} = \begin{pmatrix} -16 & 11 & -5 & -1 \\ 0 & -1 & 1 & 0 \\ 10 & -3 & 0 & 0 \\ 13 & -9 & 4 & 1 \end{pmatrix}$$

153.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 0 & 1 & 1 & 0 \\ 1 & -1 & -2 & 3 \\ 3 & 4 & 1 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & 0 & 0 \\ -1 & -18 & -8 & 3 \\ 1 & 19 & 8 & -3 \\ 0 & 7 & 3 & -1 \end{pmatrix}$$

154.

$$\begin{pmatrix} 2 & 1 & 1 & 1 \\ 1 & 2 & 1 & 0 \\ 4 & -2 & 1 & 3 \\ -1 & 6 & 1 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & -4 & -3 & -1 \\ 3 & -2 & -1 & 0 \\ -14 & 9 & 5 & 1 \\ -4 & 1 & 2 & 1 \end{pmatrix}$$

155.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 & 2 & 1 \\ -2 & 0 & -3 & 0 \\ 6 & 6 & 1 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 3 & 1 & 0 \\ -2 & 9 & 5 & -1 \\ 2 & -2 & -1 & 0 \\ 4 & -10 & -5 & 1 \end{pmatrix}$$

156.

$$\begin{pmatrix} 0 & 1 & 1 & 0 \\ -1 & 0 & 1 & -1 \\ 3 & 6 & 3 & 2 \\ 3 & 9 & 7 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & -1 & -1 & 1 \\ -2 & 3 & 2 & -1 \\ 3 & -3 & -2 & 1 \\ 6 & -3 & -1 & 0 \end{pmatrix}$$



157.

$$\begin{pmatrix} 2 & 4 & 1 & 1 \\ 3 & 5 & 1 & 2 \\ 8 & 15 & 4 & 6 \\ 9 & 19 & 7 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & 16 & -11 & 3 \\ -4 & -10 & 7 & -2 \\ 7 & 13 & -10 & 3 \\ -4 & -5 & 4 & -1 \end{pmatrix}$$

158.

$$\begin{pmatrix} 1 & 2 & 1 & 0 \\ -1 & 2 & 0 & -1 \\ 3 & 1 & 2 & 1 \\ 1 & 0 & 0 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & -6 & -4 & -1 \\ 2 & -1 & -1 & 0 \\ -11 & 8 & 6 & 1 \\ -4 & 3 & 2 & 1 \end{pmatrix}$$

159.

$$\begin{pmatrix} 2 & -1 & 3 & 3 \\ 4 & 1 & 4 & 3 \\ 5 & 4 & 3 & 1 \\ -3 & -8 & 1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -1 & 2 & 1 \\ 6 & -5 & 1 & -1 \\ -11 & 13 & -6 & 0 \\ 14 & -14 & 5 & -1 \end{pmatrix}$$

160.

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

161.

$$\begin{pmatrix} 1 & 3 & 0 & 3 \\ 3 & 6 & 1 & 6 \\ 4 & 4 & 3 & 4 \\ 3 & 1 & 3 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & 9 & -3 & 0 \\ 6 & -3 & 0 & 1 \\ 12 & -8 & 3 & 0 \\ -1 & 0 & 1 & -1 \end{pmatrix}$$

162.

$$\begin{pmatrix} -1 & 0 & 1 & 1 \\ -1 & 1 & 3 & 3 \\ 5 & 6 & 9 & 8 \\ 4 & 4 & 5 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -2 & 1 & -1 \\ -7 & 5 & -2 & 2 \\ 8 & -4 & 0 & 1 \\ -5 & 2 & 1 & -2 \end{pmatrix}$$

163.

$$\begin{pmatrix} 2 & 1 & 1 & 4 \\ 1 & 1 & 0 & 3 \\ 4 & 1 & 2 & 7 \\ -4 & 0 & -5 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & -11 & -1 & 2 \\ 9 & -6 & -2 & 1 \\ -4 & 4 & 0 & -1 \\ -7 & 6 & 1 & -1 \end{pmatrix}$$

164.

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

165.

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

166.

$$\begin{pmatrix} 1 & 1 & 3 & 1 \\ 0 & 1 & 1 & 1 \\ -1 & 1 & 0 & 1 \\ 0 & 1 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 3 & -2 & 0 \\ 1 & 0 & 1 & -1 \\ 1 & -2 & 1 & 0 \\ -2 & 3 & -2 & 1 \end{pmatrix}$$

167.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 5 & 1 & 2 & 2 \\ -2 & 4 & -3 & 3 \\ 12 & 1 & 6 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & 0 & -2 & -1 \\ 3 & -3 & 0 & 1 \\ -13 & -1 & 3 & 2 \\ -11 & 3 & 2 & 0 \end{pmatrix}$$

168.

$$\begin{pmatrix} 1 & 3 & 1 & 2 \\ 2 & 2 & 0 & 1 \\ 2 & 1 & 0 & 0 \\ -3 & 8 & 4 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -1 & -2 & -1 \\ -8 & 2 & 5 & 2 \\ 5 & -3 & -1 & -1 \\ 8 & -1 & -6 & -2 \end{pmatrix}$$

169.

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

170.

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

171.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 2 & 2 & 1 & 4 \\ -3 & 1 & -1 & -3 \\ 4 & 4 & 1 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -13 & 1 & 3 & 2 \\ -7 & 1 & 2 & 1 \\ 8 & 1 & -2 & -2 \\ 8 & -1 & -2 & -1 \end{pmatrix}$$

172.

$$\begin{pmatrix} 3 & 1 & 3 & 1 \\ 5 & 1 & 5 & 2 \\ 5 & 1 & 4 & 3 \\ -1 & 2 & 0 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} 16 & -8 & -2 & -3 \\ -3 & 1 & 1 & 1 \\ -11 & 6 & 1 & 2 \\ -11 & 5 & 2 & 2 \end{pmatrix}$$

173.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 1 & 1 & -1 & 3 \\ 6 & 6 & -1 & 9 \\ 2 & 1 & -1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & -3 & 2 & 1 \\ 16 & 4 & -3 & -1 \\ -9 & -3 & 2 & 0 \\ -5 & -1 & 1 & 0 \end{pmatrix}$$

174.

$$\begin{pmatrix} 2 & 3 & 2 & 2 \\ 4 & 7 & 5 & 5 \\ 4 & 5 & 2 & 3 \\ -7 & -10 & -6 & -7 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -2 & -1 & -1 \\ -1 & 2 & 2 & 2 \\ 4 & -1 & -1 & 0 \\ -5 & 0 & -1 & -2 \end{pmatrix}$$

175.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 4 & 5 & 3 & -1 \\ 4 & 4 & 4 & -1 \\ 6 & 5 & 8 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & -3 & 7 & -2 \\ 2 & 2 & -4 & 1 \\ 2 & 1 & -3 & 1 \\ 4 & 0 & -1 & 0 \end{pmatrix}$$

176.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 3 & 2 & 4 & 5 \\ 0 & 3 & 1 & 3 \\ 2 & 6 & 3 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 0 & -2 & 1 \\ -8 & 2 & -3 & 1 \\ -9 & 3 & -2 & 0 \\ 11 & -3 & 4 & -1 \end{pmatrix}$$

177.

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

178.

$$\begin{pmatrix} 1 & 1 & 1 & 2 \\ 1 & 1 & 2 & 2 \\ 0 & 1 & 3 & 3 \\ 2 & 3 & 1 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & -2 & 0 & -1 \\ -15 & 9 & -2 & 3 \\ -1 & 1 & 0 & 0 \\ 6 & -4 & 1 & -1 \end{pmatrix}$$

179.

$$\begin{pmatrix} 0 & 3 & 3 & 1 \\ 1 & 11 & 11 & 4 \\ 3 & 13 & 14 & 5 \\ -3 & 6 & 5 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & 1 & 1 & 1 \\ -19 & 3 & 1 & 2 \\ 13 & -3 & 0 & -1 \\ 19 & 0 & -3 & -3 \end{pmatrix}$$

180.

$$\begin{pmatrix} -1 & 1 & 0 & -1 \\ 0 & 1 & 1 & 0 \\ 2 & 1 & 1 & 3 \\ 2 & 7 & 6 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & 13 & 5 & -3 \\ 2 & 4 & 2 & -1 \\ -2 & -3 & -2 & 1 \\ -2 & -9 & -3 & 2 \end{pmatrix}$$

181.

$$\begin{pmatrix} 1 & 1 & 0 & 2 \\ 1 & 0 & 1 & 1 \\ 1 & 1 & 1 & 2 \\ -1 & 7 & -6 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 9 & -3 & 1 \\ -5 & 7 & -1 & 1 \\ -1 & 0 & 1 & 0 \\ 5 & -8 & 2 & -1 \end{pmatrix}$$

182.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 2 & -1 & 0 & 1 \\ -2 & 2 & 1 & 0 \\ 0 & 2 & 3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & -1 & 0 \\ 0 & 3 & 3 & -1 \\ 2 & -8 & -7 & 2 \\ -2 & 6 & 5 & -1 \end{pmatrix}$$

183.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 2 & 0 & 4 & 5 \\ 0 & -1 & 5 & 7 \\ 6 & 1 & 12 & 16 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & -6 & 1 & 1 \\ -10 & 8 & -2 & -1 \\ -16 & 17 & -3 & -3 \\ 10 & -11 & 2 & 2 \end{pmatrix}$$

184.

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

185.

$$\begin{pmatrix} 3 & 2 & 1 & 3 \\ 7 & 4 & 2 & 7 \\ 4 & 3 & 1 & 3 \\ 9 & 9 & 1 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 0 & 7 & -1 \\ 5 & 0 & -6 & 1 \\ -3 & -3 & 12 & -2 \\ 4 & 1 & -7 & 1 \end{pmatrix}$$

186.

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

187.

$$\begin{pmatrix} 0 & 1 & 2 & 1 \\ 1 & 1 & 4 & 1 \\ -1 & 2 & 3 & 3 \\ -8 & 3 & -7 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -11 & 4 & -2 \\ 9 & -7 & 1 & -1 \\ -5 & 6 & -2 & 1 \\ 2 & -5 & 3 & -1 \end{pmatrix}$$

188.

$$\begin{pmatrix} 1 & 1 & 0 & 2 \\ 4 & 4 & 1 & 10 \\ 1 & 0 & -3 & -3 \\ 2 & 2 & -1 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & 0 & 1 & -3 \\ 7 & -2 & -1 & 1 \\ 8 & -1 & 0 & -2 \\ -6 & 1 & 0 & 1 \end{pmatrix}$$

189.

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

190.

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

191.

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

192.

$$\begin{pmatrix} 1 & 2 & 2 & 1 \\ -1 & -1 & -1 & 0 \\ 6 & 9 & 9 & 2 \\ 4 & 7 & 8 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -5 & -1 & 0 \\ -2 & 6 & 2 & -1 \\ 0 & -2 & -1 & 1 \\ 3 & -3 & -1 & 0 \end{pmatrix}$$

193.

$$\begin{pmatrix} 1 & 3 & 4 & 1 \\ 1 & 2 & 3 & 0 \\ 0 & -1 & -1 & -2 \\ 4 & 11 & 14 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 1 & 1 & 1 \\ 2 & -6 & 4 & 1 \\ 0 & 4 & -3 & -1 \\ -1 & 1 & -1 & 0 \end{pmatrix}$$

194.

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

195.

$$\begin{pmatrix} 2 & 0 & 1 & 1 \\ 1 & 1 & 1 & 1 \\ 1 & -2 & 1 & 0 \\ 10 & 6 & 4 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & 0 & -3 & -1 \\ 6 & 1 & -3 & -1 \\ 5 & 2 & -2 & -1 \\ -18 & -2 & 8 & 3 \end{pmatrix}$$

196.

$$\begin{pmatrix} -1 & -1 & 0 & 0 \\ 1 & 2 & 3 & 2 \\ 0 & 2 & 7 & 5 \\ 4 & 4 & 7 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & 7 & -4 & 1 \\ -11 & -7 & 4 & -1 \\ 16 & 12 & -6 & 1 \\ -18 & -14 & 7 & -1 \end{pmatrix}$$

197.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 0 & -1 & 2 & 2 \\ 4 & 2 & 2 & 1 \\ -3 & -10 & 14 & 15 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & -8 & 1 & 1 \\ 2 & 15 & -2 & -2 \\ -5 & -6 & 2 & 1 \\ 6 & 14 & -3 & -2 \end{pmatrix}$$

198.

$$\begin{pmatrix} 1 & 3 & 2 & 2 \\ 4 & 8 & 5 & 6 \\ 5 & 6 & 3 & 5 \\ 3 & -1 & -2 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 1 & 1 & -1 \\ 12 & -5 & 1 & 1 \\ -14 & 5 & 0 & -2 \\ -1 & 2 & -2 & 1 \end{pmatrix}$$

199.

$$\begin{pmatrix} 3 & 4 & 0 & 1 \\ 1 & 1 & -1 & 1 \\ 10 & 13 & -2 & 4 \\ 5 & 7 & -2 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & -4 & 5 & -3 \\ 6 & 2 & -3 & 2 \\ 3 & 1 & -1 & 0 \\ 7 & 4 & -3 & 1 \end{pmatrix}$$

200.

$$\begin{pmatrix} 1 & 3 & 1 & 1 \\ 3 & 8 & 3 & 3 \\ 3 & 11 & 6 & 4 \\ 3 & 8 & 4 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & -1 & 2 \\ 3 & -1 & 0 & 0 \\ 0 & -1 & 0 & 1 \\ -9 & 5 & 1 & -3 \end{pmatrix}$$

201.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 4 & 4 & -2 & 3 \\ 3 & 3 & 2 & 3 \\ 13 & 12 & -7 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -3 & -1 & 1 \\ 9 & 4 & -4 & -1 \\ 3 & 0 & -1 & 0 \\ -14 & -1 & 6 & 0 \end{pmatrix}$$

202.

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

203.

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

204.

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

205.

$$\begin{pmatrix} 1 & 1 & -1 & -1 \\ 1 & 1 & 0 & 1 \\ 2 & 1 & 1 & 5 \\ 1 & 2 & 1 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 8 & -1 & -2 \\ 1 & -2 & 0 & 1 \\ -5 & 11 & -2 & -2 \\ 2 & -5 & 1 & 1 \end{pmatrix}$$

206.

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

207.

$$\begin{pmatrix} 1 & 3 & 2 & -1 \\ 1 & 3 & 2 & 0 \\ 1 & 4 & 2 & 4 \\ 1 & 6 & 3 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -4 & 3 & -2 \\ 4 & -5 & 1 & 0 \\ -8 & 10 & -3 & 1 \\ -1 & 1 & 0 & 0 \end{pmatrix}$$

208.

$$\begin{pmatrix} -1 & 0 & 0 & -1 \\ 1 & 1 & 1 & 1 \\ 3 & 3 & 2 & 2 \\ 2 & 13 & 10 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & 4 & 3 & -1 \\ -10 & -6 & -2 & 1 \\ 11 & 7 & 2 & -1 \\ -11 & -4 & -3 & 1 \end{pmatrix}$$

209.

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

210.

$$\begin{pmatrix} 1 & 2 & 0 & 0 \\ 3 & 7 & 1 & 1 \\ 2 & 2 & -1 & -1 \\ 0 & 2 & 0 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -9 & 2 & 2 & 0 \\ 5 & -1 & -1 & 0 \\ 2 & 0 & -1 & -1 \\ -10 & 2 & 2 & 1 \end{pmatrix}$$

211.

$$\begin{pmatrix} 2 & 6 & 5 & 3 \\ 0 & 1 & 1 & 0 \\ 6 & 16 & 13 & 8 \\ 3 & 17 & 16 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & -5 & 3 & 1 \\ 12 & 11 & -3 & -2 \\ -12 & -10 & 3 & 2 \\ 3 & -2 & -1 & 0 \end{pmatrix}$$

212.

$$\begin{pmatrix} 3 & 0 & 1 & 0 \\ 11 & 1 & 4 & 0 \\ 5 & 3 & 3 & -1 \\ 2 & 2 & 2 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -1 & 1 & -1 \\ -1 & 0 & 1 & -1 \\ -8 & 3 & -3 & 3 \\ -12 & 4 & -2 & 1 \end{pmatrix}$$

213.

$$\begin{pmatrix} 1 & 2 & 2 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 5 & 6 & 2 \\ 3 & 11 & 12 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 2 & -1 & 1 \\ 12 & -6 & 1 & -2 \\ -11 & 5 & -1 & 2 \\ 3 & 0 & 1 & -1 \end{pmatrix}$$

214.

$$\begin{pmatrix} 1 & 1 & -1 & 0 \\ 2 & 4 & -2 & 1 \\ 1 & 4 & 0 & 3 \\ 1 & 4 & 1 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & -5 & 5 & -2 \\ 1 & -1 & 2 & -1 \\ 8 & -6 & 7 & -3 \\ -4 & 3 & -4 & 2 \end{pmatrix}$$

215.

$$\begin{pmatrix} 3 & 1 & 2 & 2 \\ 2 & 2 & 1 & 1 \\ 10 & 3 & 7 & 7 \\ -2 & -1 & -2 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & -1 & -3 & 0 \\ -4 & 1 & 1 & 0 \\ -4 & 0 & 1 & -1 \\ -10 & 1 & 3 & 1 \end{pmatrix}$$

216.

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

217.

$$\begin{pmatrix} 2 & 1 & 1 & 1 \\ 7 & 5 & 4 & 3 \\ 1 & -1 & 1 & 2 \\ 10 & 10 & 6 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 2 & -1 & -1 \\ 7 & -5 & 1 & 2 \\ -16 & 9 & -1 & -3 \\ 12 & -8 & 2 & 3 \end{pmatrix}$$

218.

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

219.

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

220.

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

221.

$$\begin{pmatrix} 1 & 1 & 3 & 0 \\ 3 & 4 & 10 & 0 \\ 0 & 4 & 4 & 1 \\ 3 & 5 & 10 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & 3 & -2 & 2 \\ -12 & 3 & -1 & 1 \\ 9 & -2 & 1 & -1 \\ 12 & -4 & 1 & 0 \end{pmatrix}$$

222.

$$\begin{pmatrix} 1 & 3 & 1 & 4 \\ 1 & 11 & 8 & 11 \\ -3 & 13 & 17 & 7 \\ -5 & 0 & 9 & -7 \end{pmatrix}^{-1} = \begin{pmatrix} 13 & -13 & 8 & -5 \\ -8 & -6 & 7 & -7 \\ 8 & -1 & -1 & 2 \\ 1 & 8 & -7 & 6 \end{pmatrix}$$

223.

$$\begin{pmatrix} 0 & 3 & 0 & 2 \\ 0 & 9 & 1 & 7 \\ -1 & 10 & -3 & 5 \\ 2 & 6 & 9 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & 9 & -9 & -4 \\ 1 & -6 & 4 & 2 \\ -2 & -8 & 6 & 3 \\ -1 & 9 & -6 & -3 \end{pmatrix}$$

224.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 1 & 0 & 2 & 2 \\ 6 & 3 & 2 & -2 \\ 13 & 5 & 4 & -3 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -1 & 0 & 0 \\ 18 & -8 & 7 & -4 \\ -17 & 8 & -5 & 3 \\ 16 & -7 & 5 & -3 \end{pmatrix}$$

225.

$$\begin{pmatrix} 1 & 2 & 1 & 0 \\ 2 & 6 & 2 & 1 \\ 0 & 7 & 0 & 3 \\ 5 & 12 & 6 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 7 & -2 & -1 \\ 6 & -3 & 1 & 0 \\ -3 & -1 & 0 & 1 \\ -14 & 7 & -2 & 0 \end{pmatrix}$$

226.

$$\begin{pmatrix} 4 & 2 & 3 & 0 \\ 4 & 3 & 4 & -1 \\ 10 & 2 & 4 & 3 \\ 1 & 1 & 1 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & 0 & 1 \\ -18 & 11 & 3 & -2 \\ 11 & -6 & -2 & 0 \\ -6 & 4 & 1 & -2 \end{pmatrix}$$

**227.**

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

**228.**

$$\begin{pmatrix} 1 & 1 & 2 & 0 \\ 2 & 1 & 2 & -1 \\ 0 & 0 & 1 & -1 \\ 7 & 5 & 6 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 3 & -4 & -1 \\ -7 & -7 & 10 & 3 \\ 3 & 2 & -3 & -1 \\ 3 & 2 & -4 & -1 \end{pmatrix}$$

**229.**

$$\begin{pmatrix} 2 & 2 & 1 & 3 \\ 3 & 2 & 2 & 2 \\ -2 & 1 & -3 & 4 \\ 5 & 4 & 3 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & 5 & 2 & 2 \\ 8 & -1 & -1 & -3 \\ 8 & -5 & -2 & -1 \\ -1 & -1 & 0 & 1 \end{pmatrix}$$

**230.**

$$\begin{pmatrix} 3 & 4 & 5 & 2 \\ 7 & 10 & 12 & 5 \\ 5 & 5 & 8 & 2 \\ -3 & -8 & -5 & -5 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -3 & 2 & -1 \\ -13 & 3 & 3 & -1 \\ 2 & 1 & -2 & 1 \\ 17 & -4 & -4 & 1 \end{pmatrix}$$

**231.**

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 2 & 1 & 1 & 3 \\ 0 & 1 & 1 & 2 \\ 11 & 3 & 4 & 13 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & 6 & -3 & -1 \\ 1 & 11 & -4 & -2 \\ 3 & 11 & -5 & -2 \\ -2 & -11 & 5 & 2 \end{pmatrix}$$

**232.**

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 0 & -1 & 2 & 1 \\ 1 & 1 & 1 & 1 \\ 2 & 1 & 3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & 0 & -1 & 1 \\ 1 & 0 & 2 & -1 \\ 0 & 1 & 2 & -1 \\ 1 & -1 & -2 & 1 \end{pmatrix}$$

**233.**

$$\begin{pmatrix} 0 & 2 & 1 & 0 \\ 1 & 1 & 0 & 1 \\ 0 & 5 & 3 & 1 \\ 4 & 9 & 4 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & -7 & -5 & 2 \\ -2 & 4 & 2 & -1 \\ 5 & -8 & -4 & 2 \\ -5 & 4 & 3 & -1 \end{pmatrix}$$

**234.**

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

**235.**

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

**236.**

$$\begin{pmatrix} 1 & 1 & 2 & 2 \\ 4 & 3 & 7 & 8 \\ 4 & 5 & 12 & 10 \\ 5 & 4 & 11 & 11 \end{pmatrix}^{-1} = \begin{pmatrix} 17 & -6 & -3 & 4 \\ -2 & 2 & 1 & -2 \\ 6 & -3 & -1 & 2 \\ -13 & 5 & 2 & -3 \end{pmatrix}$$



**237.**

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 2 & 3 & 2 & 1 \\ 7 & 9 & 8 & 6 \\ -1 & -2 & 0 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -2 & 0 & -1 \\ 0 & 4 & -1 & 1 \\ -5 & -5 & 2 & -1 \\ 2 & 3 & -1 & 1 \end{pmatrix}$$

**238.**

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

**239.**

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

**240.**

$$\begin{pmatrix} 2 & 0 & -1 & 0 \\ 6 & 0 & -4 & 1 \\ 0 & 3 & 2 & 2 \\ 5 & 7 & 2 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & -1 & -7 & 3 \\ 14 & 2 & 19 & -8 \\ -9 & -2 & -14 & 6 \\ -12 & -1 & -14 & 6 \end{pmatrix}$$

**241.**

$$\begin{pmatrix} 0 & 1 & 0 & 2 \\ 3 & 4 & 3 & 4 \\ 7 & 5 & 6 & 0 \\ 13 & 5 & 10 & -9 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 14 & -17 & 6 \\ 5 & -16 & 18 & -6 \\ -3 & -3 & 5 & -2 \\ -2 & 8 & -9 & 3 \end{pmatrix}$$

**242.**

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 3 & 3 & 4 & 2 \\ 4 & 7 & 4 & 6 \\ -2 & 0 & -5 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -12 & 11 & -3 & 4 \\ -10 & 6 & -1 & 2 \\ 10 & -8 & 2 & -3 \\ 13 & -9 & 2 & -3 \end{pmatrix}$$

**243.**

$$\begin{pmatrix} 2 & 0 & 0 & 3 \\ 5 & -1 & 1 & 10 \\ 1 & 0 & 1 & 2 \\ 2 & 1 & 1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 3 & -6 & 3 \\ 12 & -5 & 9 & -4 \\ -3 & 1 & -1 & 1 \\ 5 & -2 & 4 & -2 \end{pmatrix}$$

**244.**

$$\begin{pmatrix} 2 & 2 & 1 & 1 \\ 0 & -1 & 0 & 1 \\ 5 & 4 & 2 & 3 \\ 9 & 10 & 6 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & 2 & -2 & -1 \\ -12 & -3 & 3 & 1 \\ 17 & 4 & -5 & -1 \\ -12 & -2 & 3 & 1 \end{pmatrix}$$

**245.**

$$\begin{pmatrix} 2 & 3 & 2 & 3 \\ 4 & 5 & 5 & 4 \\ 2 & 4 & -2 & 7 \\ 5 & 6 & 6 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 4 & 1 & -1 \\ -5 & 12 & 1 & -8 \\ 5 & -7 & -1 & 4 \\ 6 & -10 & -1 & 6 \end{pmatrix}$$

**246.**

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 0 & -1 & 2 & 3 \\ 4 & -1 & 6 & 8 \\ 5 & 0 & 6 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -1 & 1 & -1 \\ -6 & 0 & -1 & 2 \\ 3 & 2 & -2 & 1 \\ -4 & -1 & 1 & 0 \end{pmatrix}$$

247.

$$\begin{pmatrix} 1 & 1 & 0 & 0 \\ 1 & 1 & 1 & 1 \\ 3 & 4 & 1 & 2 \\ -3 & -1 & 4 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 3 & 1 & -1 \\ 9 & -3 & -1 & 1 \\ 10 & -1 & -2 & 1 \\ -11 & 2 & 2 & -1 \end{pmatrix}$$

248.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 0 & 1 & 1 & 1 \\ 3 & -1 & -4 & 0 \\ 6 & 4 & -3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & -7 & -1 & -1 \\ -6 & 3 & 0 & 1 \\ 9 & -6 & -1 & -1 \\ -3 & 4 & 1 & 0 \end{pmatrix}$$

249.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 3 & 2 & 2 \\ 6 & 0 & -5 & -3 \\ 4 & 6 & 3 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -9 & -1 & -1 & 2 \\ 7 & 2 & 1 & -2 \\ -18 & 0 & -2 & 3 \\ 12 & -2 & 1 & -1 \end{pmatrix}$$

250.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 1 & 0 & 2 & 2 \\ 3 & 1 & 6 & 6 \\ 0 & 1 & -1 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & 1 & 0 & 0 \\ 0 & -3 & 1 & 0 \\ 0 & -3 & 1 & -1 \\ 1 & 3 & -1 & 1 \end{pmatrix}$$

251.

$$\begin{pmatrix} 3 & 1 & 2 & 1 \\ 4 & 2 & 3 & 1 \\ 4 & 7 & 6 & -2 \\ 6 & 6 & 7 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & -3 & 1 & -1 \\ -12 & 10 & -1 & 0 \\ 6 & -6 & 0 & 1 \\ -14 & 11 & -2 & 1 \end{pmatrix}$$

252.

$$\begin{pmatrix} 3 & 0 & 1 & 1 \\ 6 & 2 & 2 & 3 \\ -2 & -1 & 0 & -1 \\ 7 & 6 & 4 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 4 & 2 & -1 \\ -10 & 9 & 5 & -2 \\ -5 & 5 & 4 & -1 \\ 18 & -17 & -10 & 4 \end{pmatrix}$$

253.

$$\begin{pmatrix} 1 & 0 & 0 & 1 \\ 0 & 1 & 1 & 0 \\ -1 & 2 & 1 & 0 \\ 7 & 3 & 6 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & -9 & 3 & 1 \\ -3 & -10 & 4 & 1 \\ 3 & 11 & -4 & -1 \\ 4 & 9 & -3 & -1 \end{pmatrix}$$

254.

$$\begin{pmatrix} 1 & 2 & 0 & 1 \\ 0 & 1 & 1 & 1 \\ 2 & 1 & -2 & -1 \\ 1 & 1 & 0 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & 2 & 1 & 1 \\ 1 & 0 & 0 & -1 \\ -2 & 3 & 1 & 0 \\ 1 & -2 & -1 & 1 \end{pmatrix}$$

255.

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

256.

$$\begin{pmatrix} 2 & 0 & 1 & 2 \\ 0 & -1 & -2 & 2 \\ 5 & 2 & 7 & 1 \\ 5 & 1 & 5 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -3 & -2 & 1 \\ 10 & -7 & -2 & -2 \\ -5 & 4 & 2 & 0 \\ 0 & 1 & 1 & -1 \end{pmatrix}$$

257.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 2 & 1 & 4 & 4 \\ 2 & 1 & 3 & 4 \\ -2 & 3 & 4 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -4 & 1 & 1 \\ 14 & -7 & 2 & 2 \\ 0 & 1 & -1 & 0 \\ -8 & 3 & 0 & -1 \end{pmatrix}$$

258.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 1 & 1 & 0 & 1 \\ 1 & 1 & -10 & -8 \\ 7 & 6 & 2 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -12 & -5 & -1 & 1 \\ 2 & 7 & 0 & -1 \\ -9 & 1 & -1 & 0 \\ 10 & -1 & 1 & 0 \end{pmatrix}$$

259.

$$\begin{pmatrix} 4 & 1 & 2 & 2 \\ 11 & 2 & 7 & 6 \\ -3 & 1 & -4 & -3 \\ 10 & 2 & 6 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -4 & -1 & 3 \\ -5 & 6 & 2 & -4 \\ -5 & 3 & 1 & -1 \\ 2 & 2 & 0 & -3 \end{pmatrix}$$

260.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 3 & 3 & 3 & 4 \\ 3 & 3 & 2 & -1 \\ 16 & 17 & 13 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -19 & 8 & 4 & -1 \\ 8 & -5 & -3 & 1 \\ 15 & -4 & -1 & 0 \\ -3 & 1 & 0 & 0 \end{pmatrix}$$

261.

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

262.

$$\begin{pmatrix} 2 & 2 & 0 & 1 \\ 4 & 4 & 1 & 4 \\ 0 & 1 & -4 & -3 \\ 7 & 9 & -6 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & 14 & 17 & -9 \\ -3 & -16 & -19 & 10 \\ 0 & -7 & -8 & 4 \\ -1 & 4 & 4 & -2 \end{pmatrix}$$

263.

$$\begin{pmatrix} 3 & 3 & 2 & 1 \\ -3 & -1 & 2 & -4 \\ 5 & 5 & 3 & 2 \\ 2 & 3 & 2 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & -1 & -8 & 1 \\ -4 & 0 & 2 & 1 \\ -6 & 1 & 5 & -2 \\ -11 & 1 & 8 & -2 \end{pmatrix}$$

264.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 1 & 2 & 1 & 6 \\ -1 & 1 & 0 & -1 \\ 4 & 1 & 2 & 12 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -4 & 3 & 2 \\ 2 & -2 & 2 & 1 \\ -1 & -3 & 5 & 2 \\ -1 & 2 & -2 & -1 \end{pmatrix}$$

265.

$$\begin{pmatrix} 4 & 2 & 1 & 1 \\ 4 & 1 & 1 & 2 \\ 9 & 1 & 1 & 5 \\ -3 & 3 & 1 & -4 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & 1 & -4 & -3 \\ -9 & -3 & 7 & 5 \\ 5 & 4 & -5 & -3 \\ -10 & -2 & 7 & 5 \end{pmatrix}$$

266.

$$\begin{pmatrix} 0 & 1 & 2 & 0 \\ 1 & 2 & 3 & 0 \\ 1 & 6 & 10 & -1 \\ 2 & 9 & 13 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 1 & 2 & -1 \\ 7 & 0 & -4 & 2 \\ -3 & 0 & 2 & -1 \\ 7 & 1 & -3 & 1 \end{pmatrix}$$

267.

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

268.

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

269.

$$\begin{pmatrix} 1 & 3 & 5 & 1 \\ 1 & 3 & 4 & 1 \\ 3 & 7 & 8 & 2 \\ 0 & -3 & -10 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & -6 & 3 & -1 \\ 2 & 4 & -2 & 1 \\ 1 & -1 & 0 & 0 \\ -8 & -1 & 3 & -2 \end{pmatrix}$$

270.

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

271.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 1 & -1 & 1 & -2 \\ 2 & 5 & 3 & 1 \\ 6 & 16 & 8 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & 1 & -3 & 1 \\ -7 & -2 & -2 & 1 \\ 9 & 2 & 5 & -2 \\ 8 & 2 & 2 & -1 \end{pmatrix}$$

272.

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

273.

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

274.

$$\begin{pmatrix} 2 & 2 & 3 & 2 \\ 4 & 3 & 9 & 5 \\ 3 & 2 & 8 & 4 \\ 12 & 13 & 9 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & -12 & 15 & 2 \\ 7 & 4 & -6 & -1 \\ 1 & -2 & 2 & 0 \\ 2 & 11 & -12 & -1 \end{pmatrix}$$

275.

$$\begin{pmatrix} 1 & 1 & 0 & 2 \\ 2 & 2 & 0 & 5 \\ 3 & 2 & -1 & 8 \\ 5 & 9 & 3 & 13 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & 7 & -3 & -1 \\ 4 & -9 & 3 & 1 \\ -5 & 11 & -4 & -1 \\ -2 & 1 & 0 & 0 \end{pmatrix}$$

276.

$$\begin{pmatrix} 3 & 1 & 1 & 1 \\ 2 & 0 & 1 & 2 \\ 1 & 1 & 0 & 0 \\ 2 & -5 & 4 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & 1 & -8 & -1 \\ -3 & -1 & 9 & 1 \\ -4 & -3 & 14 & 2 \\ -1 & 1 & 1 & 0 \end{pmatrix}$$

277.

$$\begin{pmatrix} 2 & 3 & 3 & 0 \\ 4 & 6 & 4 & 1 \\ 1 & 1 & -3 & 2 \\ 9 & 12 & 5 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & -6 & 3 & 0 \\ -16 & 7 & -5 & 1 \\ 9 & -3 & 3 & -1 \\ 16 & -5 & 6 & -2 \end{pmatrix}$$

278.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 1 & 4 & 0 & 2 \\ 4 & 15 & -1 & 11 \\ 1 & 3 & -1 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 7 & -2 & 2 \\ 1 & -3 & 1 & -1 \\ -1 & 16 & -5 & 4 \\ 0 & 3 & -1 & 1 \end{pmatrix}$$

279.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 4 & 0 & 4 & 3 \\ 0 & -2 & -1 & -2 \\ 2 & 3 & 3 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -1 & 4 & 3 \\ 2 & 0 & -1 & -1 \\ 4 & 2 & -7 & -6 \\ -4 & -1 & 4 & 4 \end{pmatrix}$$

280.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 1 & 1 & 3 & 2 \\ 2 & 2 & -1 & -2 \\ 13 & 12 & 10 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & -4 & -4 & 1 \\ 6 & 3 & 5 & -1 \\ -6 & 2 & -1 & 0 \\ 7 & -2 & 1 & 0 \end{pmatrix}$$

281.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 2 & 1 & 1 & -1 \\ 1 & 0 & -1 & 0 \\ 5 & 8 & 3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -11 & -5 & 1 & 2 \\ 17 & 8 & -1 & -3 \\ -11 & -5 & 0 & 2 \\ -16 & -8 & 1 & 3 \end{pmatrix}$$

282.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ -1 & 0 & 1 & 1 \\ -1 & 2 & 5 & 4 \\ 7 & 10 & 8 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 8 & -2 & 1 \\ 7 & -9 & 2 & -1 \\ 4 & -10 & 3 & -1 \\ -10 & 19 & -5 & 2 \end{pmatrix}$$

283.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 0 & 1 & 1 \\ -6 & 9 & 3 & 4 \\ 2 & 0 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -3 & -1 & -1 \\ 10 & -4 & -1 & -1 \\ 0 & -2 & 0 & 1 \\ -9 & 6 & 1 & 0 \end{pmatrix}$$

284.

$$\begin{pmatrix} 1 & 1 & 0 & 0 \\ 3 & 1 & 2 & 1 \\ 6 & 3 & 1 & 3 \\ 11 & 4 & 4 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & 6 & 8 & -5 \\ 11 & -6 & -8 & 5 \\ 6 & -3 & -5 & 3 \\ 7 & -5 & -6 & 4 \end{pmatrix}$$

285.

$$\begin{pmatrix} 2 & 3 & 1 & 1 \\ 1 & 1 & 1 & 0 \\ 2 & 2 & 2 & 1 \\ 9 & 12 & 7 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & 11 & -1 & -2 \\ -2 & -5 & 0 & 1 \\ -3 & -5 & 1 & 1 \\ 0 & -2 & 1 & 0 \end{pmatrix}$$

286.

$$\begin{pmatrix} 0 & 0 & 2 & 1 \\ -1 & -1 & 1 & 0 \\ 3 & 2 & 4 & 3 \\ 6 & 4 & 11 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 2 & 1 & 0 \\ 5 & -3 & 1 & -1 \\ 2 & 0 & 2 & -1 \\ -3 & 0 & -4 & 2 \end{pmatrix}$$

287.

$$\begin{pmatrix} 3 & 0 & 3 & -2 \\ 0 & 2 & -1 & 2 \\ 2 & 2 & 1 & 1 \\ 5 & 7 & 1 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & -6 & 2 \\ 1 & 3 & 1 & -1 \\ -2 & -1 & 8 & -2 \\ -2 & -3 & 3 & 0 \end{pmatrix}$$

288.

$$\begin{pmatrix} 1 & 1 & 2 & 1 \\ 2 & 2 & 3 & 1 \\ 3 & 2 & 2 & -1 \\ 9 & 5 & 10 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 15 & -10 & 5 & -1 \\ -5 & 4 & -1 & 0 \\ -11 & 7 & -4 & 1 \\ 13 & -8 & 4 & -1 \end{pmatrix}$$

289.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 1 & 1 & 3 & 1 \\ -1 & 0 & -7 & -3 \\ 5 & 2 & 12 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & -9 & -4 & -1 \\ -2 & 3 & 1 & 0 \\ -8 & 6 & 3 & 1 \\ 15 & -11 & -6 & -2 \end{pmatrix}$$

290.

$$\begin{pmatrix} 1 & 2 & 2 & 2 \\ 0 & 1 & 1 & 1 \\ 4 & 4 & 3 & 3 \\ -1 & 3 & 7 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -2 & 0 & 0 \\ -4 & 5 & 1 & 0 \\ -11 & 7 & 3 & 1 \\ 15 & -11 & -4 & -1 \end{pmatrix}$$

291.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 2 & 2 & 1 & 0 \\ 10 & 10 & 7 & 1 \\ 12 & 11 & 7 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & -7 & 1 & 1 \\ 6 & 8 & -1 & -1 \\ 2 & -1 & 0 & 0 \\ -4 & -3 & 1 & 0 \end{pmatrix}$$

292.

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 0 & -1 & 2 & 0 \\ 4 & 1 & 2 & 1 \\ 7 & -1 & 10 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & 2 & 1 & -1 \\ -6 & -5 & -2 & 2 \\ -3 & -2 & -1 & 1 \\ -4 & 1 & 1 & 0 \end{pmatrix}$$

293.

$$\begin{pmatrix} 1 & 0 & 0 & 2 \\ 4 & 1 & 1 & 8 \\ 0 & 1 & 1 & -1 \\ 8 & 2 & 3 & 15 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -2 & 2 & 0 \\ 0 & 2 & 1 & -1 \\ -4 & -1 & -1 & 1 \\ -4 & 1 & -1 & 0 \end{pmatrix}$$

294.

$$\begin{pmatrix} 1 & 1 & 1 & 4 \\ 0 & 1 & 0 & 1 \\ 0 & 1 & -1 & -3 \\ 3 & 1 & 3 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -4 & 1 & -1 \\ -3 & 3 & 0 & 1 \\ -12 & 9 & -1 & 4 \\ 3 & -2 & 0 & -1 \end{pmatrix}$$

295.

$$\begin{pmatrix} 0 & 2 & 0 & 1 \\ 2 & 5 & 0 & 4 \\ -1 & 9 & 1 & 4 \\ -2 & 11 & 1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 2 & -3 & 3 \\ -4 & 1 & -2 & 2 \\ -8 & 1 & 0 & 1 \\ 9 & -2 & 4 & -4 \end{pmatrix}$$

296.

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

297.

$$\begin{pmatrix} 1 & 1 & 4 & 1 \\ 2 & 0 & 1 & 1 \\ -1 & 3 & 11 & 1 \\ 4 & 3 & 14 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -4 & -2 & 1 \\ 13 & -11 & -5 & 1 \\ -3 & 2 & 1 & 0 \\ -3 & 7 & 3 & -2 \end{pmatrix}$$

298.

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

299.

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 4 & 0 & 3 & 0 \\ 4 & 2 & 3 & 1 \\ 4 & 5 & 1 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 1 & 0 & 0 \\ -8 & 0 & 3 & -1 \\ 4 & -1 & 0 & 0 \\ 16 & -1 & -5 & 2 \end{pmatrix}$$

300.

$$\begin{pmatrix} 1 & 2 & 4 & 3 \\ 2 & 2 & 5 & 4 \\ 2 & -1 & 1 & 1 \\ 2 & 8 & 10 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & -12 & 6 & 1 \\ 10 & -11 & 5 & 1 \\ 6 & -5 & 2 & 0 \\ -18 & 18 & -8 & -1 \end{pmatrix}$$

301.

$$\begin{pmatrix} 1 & 1 & 3 & 1 \\ 4 & 3 & 10 & 4 \\ 4 & 4 & 10 & 3 \\ -3 & 1 & -12 & -8 \end{pmatrix}^{-1} = \begin{pmatrix} -14 & -3 & 6 & -1 \\ 18 & 7 & -10 & 2 \\ -7 & -4 & 5 & -1 \\ 18 & 8 & -11 & 2 \end{pmatrix}$$

302.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 4 & 1 & 5 \\ 1 & 2 & -2 & 5 \\ 1 & -1 & -6 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 9 & -13 & 5 \\ 0 & -4 & 7 & -3 \\ 0 & 3 & -5 & 2 \\ 1 & 1 & -2 & 1 \end{pmatrix}$$

303.

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

304.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 0 & 0 \\ 0 & 1 & -4 & -4 \\ 3 & 7 & 1 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 5 & -1 & 0 \\ 4 & -4 & 1 & 0 \\ 18 & -15 & 4 & -1 \\ -17 & 14 & -4 & 1 \end{pmatrix}$$

305.

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

306.

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

307.

$$\begin{pmatrix} 3 & 1 & 3 & 0 \\ 2 & 1 & 2 & 1 \\ 7 & 2 & 6 & 2 \\ 4 & 1 & 3 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & 0 & -1 & 2 \\ 1 & 3 & -3 & 3 \\ 0 & -1 & 2 & -3 \\ -1 & 0 & 1 & -1 \end{pmatrix}$$

308.

$$\begin{pmatrix} 2 & 3 & 1 & 1 \\ 1 & 0 & -1 & 1 \\ 1 & 5 & 3 & 0 \\ 0 & 1 & -2 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 5 & 2 & -1 \\ -6 & 8 & 4 & -1 \\ 11 & -15 & -7 & 2 \\ 14 & -19 & -9 & 3 \end{pmatrix}$$

309.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 2 & 0 & 1 & 0 \\ 3 & -3 & 2 & -1 \\ 2 & 7 & 0 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -3 & 2 & 1 \\ 0 & -4 & 2 & 1 \\ 2 & 7 & -4 & -2 \\ 1 & 17 & -9 & -4 \end{pmatrix}$$

310.

$$\begin{pmatrix} 0 & 1 & -1 & 1 \\ 2 & 0 & 3 & 0 \\ 5 & 2 & 5 & 2 \\ 2 & 3 & 1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & -7 & 3 & 0 \\ 12 & 11 & -4 & -1 \\ 4 & 5 & -2 & 0 \\ -7 & -6 & 2 & 1 \end{pmatrix}$$

311.

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

312.

$$\begin{pmatrix} 3 & 1 & 3 & 3 \\ 7 & 2 & 6 & 7 \\ 10 & 3 & 8 & 9 \\ -11 & -3 & -8 & -9 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & 0 & -1 & -1 \\ -2 & -3 & 6 & 3 \\ 3 & 0 & -2 & -1 \\ -2 & 1 & 1 & 1 \end{pmatrix}$$

313.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 0 & -1 & 0 & 1 \\ 7 & 3 & 8 & 5 \\ 3 & 5 & 5 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & -3 & -1 & 0 \\ -11 & 0 & 2 & -1 \\ 4 & 2 & -1 & 1 \\ -11 & 1 & 2 & -1 \end{pmatrix}$$

314.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 2 & 2 & 2 & -1 \\ 4 & 4 & 5 & -3 \\ 2 & 3 & -6 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & 7 & -4 & -1 \\ -6 & -2 & 2 & 1 \\ 2 & -7 & 3 & 0 \\ 2 & -5 & 2 & 0 \end{pmatrix}$$

315.

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

316.

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



317.

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

318.

$$\begin{pmatrix} 1 & 2 & 2 & 2 \\ 3 & 5 & 4 & 4 \\ 4 & 4 & 2 & 3 \\ -1 & -6 & -5 & -3 \end{pmatrix}^{-1} = \begin{pmatrix} -11 & 10 & -4 & 2 \\ 9 & -9 & 4 & -2 \\ -17 & 16 & -7 & 3 \\ 14 & -12 & 5 & -2 \end{pmatrix}$$

319.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 2 & 2 & 1 & 1 \\ 3 & 1 & 3 & -3 \\ 4 & 3 & 0 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 0 & 0 & 1 \\ 15 & -3 & 1 & -3 \\ -13 & 4 & -1 & 2 \\ -11 & 3 & -1 & 2 \end{pmatrix}$$

320.

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 1 & 1 & 1 & 0 \\ 2 & 0 & 3 & -2 \\ 3 & 7 & 6 & -5 \end{pmatrix}^{-1} = \begin{pmatrix} -17 & 14 & 5 & -2 \\ -1 & 1 & 0 & 0 \\ 18 & -14 & -5 & 2 \\ 10 & -7 & -3 & 1 \end{pmatrix}$$

321.

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

322.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 0 & 2 & 2 \\ 2 & 4 & 7 & 5 \\ 1 & 4 & 4 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & 9 & -6 & 4 \\ 5 & 4 & -3 & 2 \\ -8 & -7 & 5 & -3 \\ 4 & 3 & -2 & 1 \end{pmatrix}$$

323.

$$\begin{pmatrix} 1 & -1 & 1 & 0 \\ 0 & 2 & 1 & 1 \\ 4 & 1 & 7 & 3 \\ 7 & -3 & 8 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -2 & 1 & -1 & 1 \\ 4 & 3 & -1 & 0 \\ 7 & 2 & 0 & -1 \\ -15 & -7 & 2 & 1 \end{pmatrix}$$

324.

$$\begin{pmatrix} 1 & 2 & 0 & 1 \\ 0 & 1 & -1 & 0 \\ 2 & 6 & -3 & 1 \\ 9 & 8 & 12 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & -12 & 0 & -1 \\ -11 & 9 & 1 & 1 \\ -11 & 8 & 1 & 1 \\ 13 & -6 & -2 & -1 \end{pmatrix}$$

325.

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

326.

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

**327.**

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 1 & 1 & 2 & 2 \\ 3 & 2 & 0 & 0 \\ 2 & -1 & 1 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 2 & 1 & 0 \\ 6 & -3 & -1 & 0 \\ -16 & 9 & 3 & -1 \\ 15 & -8 & -3 & 1 \end{pmatrix}$$

**328.**

$$\begin{pmatrix} -2 & 1 & -3 & 1 \\ 6 & 4 & 5 & 2 \\ 5 & 5 & 3 & 3 \\ 12 & 5 & 12 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 0 & 3 & -2 \\ 2 & 6 & -4 & -1 \\ 4 & -1 & -2 & 2 \\ 1 & -9 & 4 & 3 \end{pmatrix}$$

**329.**

$$\begin{pmatrix} 2 & 0 & 2 & 1 \\ 3 & -1 & 2 & 2 \\ 14 & -3 & 12 & 9 \\ 10 & -4 & 9 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & 3 & -1 & 0 \\ -13 & -8 & 5 & -2 \\ 6 & 2 & -2 & 1 \\ -17 & -10 & 6 & -2 \end{pmatrix}$$

**330.**

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 0 & 2 & 1 & 0 \\ 0 & 9 & 5 & 0 \\ -7 & 1 & 6 & -6 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & -19 & 5 & -1 \\ 0 & 5 & -1 & 0 \\ 0 & -9 & 2 & 0 \\ 7 & 14 & -4 & 1 \end{pmatrix}$$

**331.**

$$\begin{pmatrix} 1 & 2 & 0 & 2 \\ 3 & 5 & 1 & 5 \\ 1 & 5 & -2 & 4 \\ 0 & 6 & -5 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 2 & -4 & 2 \\ -7 & 2 & 1 & 0 \\ -2 & 0 & 2 & -1 \\ 8 & -3 & 1 & -1 \end{pmatrix}$$

**332.**

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 2 & 1 & -1 & 2 \\ 3 & 5 & 2 & 2 \\ 3 & 3 & -1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 1 & 0 & -1 \\ -8 & 1 & 1 & 1 \\ 10 & -2 & -1 & -1 \\ 7 & -2 & -1 & 0 \end{pmatrix}$$

**333.**

$$\begin{pmatrix} 2 & 1 & 1 & 1 \\ 0 & 1 & -2 & 1 \\ 3 & 2 & 0 & 3 \\ 9 & 5 & 3 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -13 & -2 & 0 & 3 \\ 15 & 3 & -1 & -3 \\ 9 & 1 & 0 & -2 \\ 3 & 0 & 1 & -1 \end{pmatrix}$$

**334.**

$$\begin{pmatrix} 0 & 1 & -2 & 0 \\ 0 & 4 & -7 & 0 \\ 2 & 3 & 5 & 1 \\ 3 & 8 & 2 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 18 & -4 & 2 & -1 \\ -7 & 2 & 0 & 0 \\ -4 & 1 & 0 & 0 \\ 5 & -3 & -3 & 2 \end{pmatrix}$$

**335.**

$$\begin{pmatrix} 1 & 1 & 1 & 2 \\ -1 & 3 & 1 & 7 \\ -2 & 3 & 0 & 6 \\ -1 & 3 & 2 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 9 & -5 & -3 \\ 4 & -8 & 5 & 2 \\ 6 & -15 & 8 & 5 \\ -3 & 7 & -4 & -2 \end{pmatrix}$$

**336.**

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 3 & 0 & 3 & 1 \\ 6 & 1 & 7 & 2 \\ 7 & -1 & 7 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 7 & -1 & -1 \\ -8 & 5 & 0 & -1 \\ 8 & -7 & 1 & 1 \\ -3 & 1 & 0 & 0 \end{pmatrix}$$

**337.**

$$\begin{pmatrix} 1 & 0 & 0 & 1 \\ 3 & 0 & 1 & 3 \\ 7 & 1 & 4 & 7 \\ 10 & 2 & 3 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & 5 & -2 & 1 \\ 5 & -4 & 1 & 0 \\ -3 & 1 & 0 & 0 \\ 11 & -5 & 2 & -1 \end{pmatrix}$$

**338.**

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

**339.**

$$\begin{pmatrix} 1 & 1 & 0 & 0 \\ 2 & 0 & 2 & -1 \\ 13 & 6 & 8 & -2 \\ 5 & 5 & 1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -10 & 3 & -4 \\ -1 & 10 & -3 & 4 \\ -3 & 7 & -2 & 3 \\ -2 & -7 & 2 & -2 \end{pmatrix}$$

**340.**

$$\begin{pmatrix} 3 & 3 & 3 & 1 \\ 4 & 4 & 4 & 1 \\ 12 & 12 & 11 & 3 \\ -14 & -15 & -9 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} -15 & -3 & 6 & 1 \\ 14 & 1 & -5 & -1 \\ 0 & 3 & -1 & 0 \\ 4 & -3 & 0 & 0 \end{pmatrix}$$

**341.**

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

**342.**

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

**343.**

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

**344.**

$$\begin{pmatrix} 1 & 2 & 0 & 3 \\ 1 & 2 & 1 & 1 \\ 3 & 7 & 1 & 9 \\ 4 & 10 & 4 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & 4 & 0 & -1 \\ 6 & -5 & -3 & 2 \\ -9 & 5 & 4 & -2 \\ -4 & 2 & 2 & -1 \end{pmatrix}$$

**345.**

$$\begin{pmatrix} 0 & -1 & 1 & 3 \\ 2 & 1 & 1 & 2 \\ -1 & -3 & 2 & 7 \\ 4 & 1 & 2 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & -4 & -5 & 1 \\ -15 & 5 & 6 & -1 \\ 1 & 2 & 0 & -1 \\ -5 & 1 & 2 & 0 \end{pmatrix}$$

**346.**

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 0 & 1 & 1 & 0 \\ 0 & -2 & -1 & 1 \\ 9 & 6 & 12 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -2 & -1 & 0 \\ -9 & -1 & 2 & 1 \\ 9 & 2 & -2 & -1 \\ -9 & 0 & 3 & 1 \end{pmatrix}$$

347.

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

348.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 3 & 1 & 2 & 2 \\ -6 & -6 & 4 & 3 \\ 1 & -2 & 4 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & -2 & 0 & -1 \\ -10 & 3 & 0 & 1 \\ 9 & 0 & 1 & -3 \\ -16 & 2 & -1 & 4 \end{pmatrix}$$

349.

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

350.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 1 & 2 & 4 & -2 \\ 3 & 2 & 1 & 1 \\ 0 & 0 & 3 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 1 & 2 & 0 \\ -1 & 1 & 0 & -1 \\ 8 & -2 & -2 & 1 \\ 12 & -3 & -3 & 1 \end{pmatrix}$$

351.

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

352.

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

353.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 1 & 0 & 2 & 1 \\ 7 & 8 & 5 & 6 \\ 7 & 2 & 12 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} -18 & -2 & 2 & 1 \\ 11 & 3 & -1 & -1 \\ 10 & 4 & -1 & -1 \\ -2 & -5 & 0 & 1 \end{pmatrix}$$

354.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 3 & 1 & 3 & 4 \\ 2 & 0 & 1 & 2 \\ 5 & 4 & 3 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & -4 & -1 & 1 \\ 8 & -3 & -2 & 1 \\ 2 & 0 & -1 & 0 \\ -11 & 4 & 2 & -1 \end{pmatrix}$$

355.

$$\begin{pmatrix} 3 & 2 & 1 & 3 \\ 7 & 5 & 2 & 7 \\ 12 & 9 & 3 & 13 \\ 15 & 10 & 4 & 16 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 4 & -2 & 1 \\ 1 & 0 & 1 & -1 \\ 8 & -3 & 1 & -1 \\ 3 & -3 & 1 & 0 \end{pmatrix}$$

356.

$$\begin{pmatrix} 4 & 3 & 2 & 2 \\ 7 & 5 & 4 & 3 \\ 6 & 5 & 3 & 4 \\ -12 & -10 & -4 & -9 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 3 & -2 & -1 \\ 17 & -8 & 2 & 2 \\ -5 & 2 & 1 & 0 \\ -10 & 4 & 0 & -1 \end{pmatrix}$$

357.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ -2 & 1 & 1 & 2 \\ 7 & 2 & 1 & -2 \\ 7 & 6 & 4 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 3 & 2 & -1 \\ -3 & 0 & -1 & 1 \\ 7 & -7 & -3 & 1 \\ -3 & 7 & 4 & -2 \end{pmatrix}$$

358.

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

359.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 0 & 2 & -1 & -1 \\ 3 & 2 & 4 & 4 \\ 7 & 5 & 7 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & -2 & -3 & 0 \\ -3 & 1 & 1 & 0 \\ 7 & -1 & 0 & -1 \\ -13 & 2 & 2 & 1 \end{pmatrix}$$

360.

$$\begin{pmatrix} 3 & 2 & 1 & 1 \\ 4 & 3 & 2 & 3 \\ 9 & 7 & 4 & 4 \\ -3 & -1 & -1 & -5 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & 4 & -3 & 1 \\ -11 & -12 & 8 & -3 \\ 11 & 15 & -9 & 4 \\ -3 & -3 & 2 & -1 \end{pmatrix}$$

361.

$$\begin{pmatrix} 0 & 3 & 4 & 2 \\ 1 & 1 & 0 & 1 \\ -1 & 9 & 13 & 5 \\ 1 & 2 & 1 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & 3 & -1 & -3 \\ -7 & 0 & 2 & 2 \\ 4 & 1 & -1 & -2 \\ 3 & -2 & -1 & 1 \end{pmatrix}$$

362.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 0 & 1 & 1 & 1 \\ 2 & 1 & 5 & 4 \\ 5 & 2 & 13 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -1 & 3 & -1 \\ -1 & 1 & 0 & 0 \\ -1 & 1 & -5 & 2 \\ 2 & -1 & 5 & -2 \end{pmatrix}$$

363.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 2 & 2 & -3 & 3 \\ 2 & 2 & 5 & -2 \\ 2 & 3 & 2 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -1 & -2 & -1 \\ -18 & 3 & 5 & 1 \\ 10 & -2 & -3 & 0 \\ 16 & -3 & -5 & 0 \end{pmatrix}$$

364.

$$\begin{pmatrix} 1 & 1 & 1 & 2 \\ 1 & 2 & 4 & 6 \\ 0 & 0 & -3 & -4 \\ 0 & 2 & 10 & 13 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & -5 & 2 & 2 \\ -1 & 1 & 1 & 0 \\ 8 & -8 & 5 & 4 \\ -6 & 6 & -4 & -3 \end{pmatrix}$$

365.

$$\begin{pmatrix} 3 & 0 & 3 & 1 \\ 8 & 1 & 8 & 4 \\ 4 & 0 & 4 & 1 \\ 0 & 2 & 1 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -9 & 2 & 3 & -1 \\ -8 & 1 & 4 & 0 \\ 8 & -2 & -2 & 1 \\ 4 & 0 & -3 & 0 \end{pmatrix}$$

366.

$$\begin{pmatrix} 3 & 1 & 3 & 0 \\ 1 & 0 & 1 & 0 \\ 5 & 1 & 4 & -1 \\ 7 & 6 & 8 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 8 & 2 & 1 \\ 1 & -3 & 0 & 0 \\ 8 & -7 & -2 & -1 \\ -7 & 9 & 1 & 1 \end{pmatrix}$$

367.

$$\begin{pmatrix} 3 & 1 & 0 & 2 \\ 3 & 2 & -1 & 2 \\ 2 & -2 & 3 & 1 \\ 4 & -3 & 5 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 3 & -2 & 1 & -1 \\ -10 & 8 & 1 & 1 \\ -9 & 7 & 1 & 1 \\ 1 & -1 & -2 & 1 \end{pmatrix}$$

368.

$$\begin{pmatrix} 1 & 2 & 3 & 1 \\ 1 & 5 & 7 & 2 \\ 4 & 4 & 6 & 3 \\ 3 & -4 & -6 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & 0 & -2 & 1 \\ 3 & 3 & -3 & 2 \\ 1 & -2 & 1 & -1 \\ -14 & 0 & 5 & -2 \end{pmatrix}$$

369.

$$\begin{pmatrix} 1 & 2 & 0 & 1 \\ 1 & 4 & 0 & 2 \\ 3 & 2 & -1 & 0 \\ 1 & 3 & -1 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & -1 & 0 & 0 \\ 4 & -2 & -1 & 1 \\ 14 & -7 & -3 & 2 \\ -9 & 5 & 2 & -2 \end{pmatrix}$$

370.

$$\begin{pmatrix} 1 & 1 & 3 & 2 \\ 1 & 0 & 0 & 1 \\ 3 & 3 & 8 & 5 \\ -4 & 2 & 5 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -5 & 1 & -1 \\ -6 & 11 & 1 & 2 \\ 2 & -6 & 0 & -1 \\ 1 & 6 & -1 & 1 \end{pmatrix}$$

371.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 1 & 0 & 1 & 2 \\ 3 & 3 & -3 & -2 \\ 1 & 2 & 3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 17 & -2 & 2 & -3 \\ -10 & 1 & -1 & 2 \\ 19 & -3 & 2 & -3 \\ -18 & 3 & -2 & 3 \end{pmatrix}$$

372.

$$\begin{pmatrix} 2 & 4 & 2 & -1 \\ 7 & 5 & 6 & 3 \\ 4 & 7 & 4 & -1 \\ 9 & 0 & 7 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & 5 & -7 & -2 \\ -3 & 4 & -1 & -2 \\ -2 & -11 & 9 & 5 \\ -5 & 4 & 0 & -2 \end{pmatrix}$$

373.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & -3 \\ 1 & 1 & 0 & -4 \\ 1 & 1 & -1 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 16 & -14 & -1 \\ 1 & -12 & 11 & 1 \\ 0 & 11 & -10 & -1 \\ 0 & 1 & -1 & 0 \end{pmatrix}$$

374.

$$\begin{pmatrix} 0 & 1 & 1 & 0 \\ 1 & 2 & 3 & 1 \\ 3 & 1 & 3 & 1 \\ 0 & 8 & 9 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & -5 & 2 & 1 \\ 0 & -9 & 3 & 2 \\ 1 & 9 & -3 & -2 \\ -3 & -3 & 1 & 1 \end{pmatrix}$$

375.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 0 & 1 & 1 \\ -3 & 5 & 1 & 1 \\ 6 & -4 & 5 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -5 & 4 & 1 & 0 \\ -4 & 3 & 1 & 0 \\ 16 & -6 & -4 & -1 \\ -11 & 3 & 3 & 1 \end{pmatrix}$$

376.

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 2 & 1 & 2 & 3 \\ 5 & 1 & 6 & -2 \\ 4 & 1 & 6 & -6 \end{pmatrix}^{-1} = \begin{pmatrix} -16 & -4 & 9 & -5 \\ -14 & -2 & 6 & -3 \\ 17 & 4 & -9 & 5 \\ 4 & 1 & -2 & 1 \end{pmatrix}$$

377.

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

378.

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

379.

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

380.

$$\begin{pmatrix} 0 & 1 & 1 & 0 \\ 3 & 6 & 5 & 3 \\ 4 & 5 & 4 & 4 \\ 8 & 0 & -2 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & -1 & -1 & 1 \\ -8 & 4 & -3 & 0 \\ 9 & -4 & 3 & 0 \\ -10 & 0 & 2 & -1 \end{pmatrix}$$

381.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 0 & -1 & 1 & 1 \\ 2 & 1 & 8 & 7 \\ 3 & 0 & 8 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -1 & -1 & 1 \\ 1 & -1 & 0 & 0 \\ -10 & 3 & 3 & -2 \\ 11 & -3 & -3 & 2 \end{pmatrix}$$

382.

$$\begin{pmatrix} 2 & 1 & -1 & 2 \\ 0 & 0 & -1 & 1 \\ 4 & 3 & 2 & 0 \\ 19 & 12 & 3 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & -5 & 2 & -1 \\ -2 & 4 & 1 & 0 \\ -9 & 4 & -5 & 2 \\ -9 & 5 & -5 & 2 \end{pmatrix}$$

383.

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

384.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 3 & 4 & 0 & 3 \\ 0 & 1 & -1 & 0 \\ 4 & 1 & -2 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -15 & 4 & -2 & 1 \\ -3 & 1 & 0 & 0 \\ -3 & 1 & -1 & 0 \\ 19 & -5 & 2 & -1 \end{pmatrix}$$

385.

$$\begin{pmatrix} 3 & 0 & 1 & 3 \\ 8 & 3 & 5 & 7 \\ 9 & 6 & 8 & 7 \\ -2 & 1 & 1 & -2 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & -13 & 7 & -3 \\ -11 & 10 & -5 & 1 \\ 7 & -6 & 3 & 0 \\ -14 & 15 & -8 & 3 \end{pmatrix}$$

386.

$$\begin{pmatrix} 0 & -1 & 1 & 1 \\ 1 & 2 & 1 & 0 \\ 1 & -3 & 4 & 4 \\ 4 & 6 & 7 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & -5 & 2 & 1 \\ 6 & 5 & -1 & -1 \\ -2 & -4 & 0 & 1 \\ 9 & 9 & -1 & -2 \end{pmatrix}$$

387.

$$\begin{pmatrix} 3 & 2 & 3 & 4 \\ 6 & 4 & 6 & 7 \\ 7 & 5 & 5 & 6 \\ -11 & -8 & -8 & -10 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -2 & 8 & 5 \\ -5 & 2 & -9 & -6 \\ -3 & 2 & -2 & -1 \\ 2 & -1 & 0 & 0 \end{pmatrix}$$

388.

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

389.

$$\begin{pmatrix} 0 & 1 & 1 & 3 \\ 1 & 0 & 0 & 4 \\ 1 & 2 & 2 & 11 \\ -1 & 1 & 2 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & 5 & -4 & 0 \\ 2 & -1 & 0 & -1 \\ 5 & 4 & -3 & 1 \\ -2 & -1 & 1 & 0 \end{pmatrix}$$

390.

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

391.

$$\begin{pmatrix} 1 & 1 & 0 & 0 \\ 1 & 0 & 1 & 1 \\ 2 & 2 & -1 & 0 \\ 3 & -1 & 0 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -11 & 5 & 5 & -1 \\ 12 & -5 & -5 & 1 \\ 2 & 0 & -1 & 0 \\ 9 & -4 & -4 & 1 \end{pmatrix}$$

392.

$$\begin{pmatrix} 1 & 1 & 1 & 0 \\ 1 & 0 & 1 & 2 \\ 5 & 3 & 5 & 3 \\ 10 & 6 & 9 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -15 & -9 & 3 & 1 \\ 7 & 3 & -2 & 0 \\ 9 & 6 & -1 & -1 \\ 3 & 2 & -1 & 0 \end{pmatrix}$$

393.

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

394.

$$\begin{pmatrix} 2 & 1 & 3 & 0 \\ 2 & 2 & 3 & 1 \\ -5 & 0 & -7 & 2 \\ 6 & 5 & 10 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 4 & -1 & -1 \\ 10 & -2 & 2 & -1 \\ -1 & -2 & 0 & 1 \\ -11 & 3 & -2 & 1 \end{pmatrix}$$

395.

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

396.

$$\begin{pmatrix} 2 & 0 & 0 & 1 \\ 1 & 1 & 2 & 0 \\ 4 & 3 & 6 & 1 \\ 0 & -3 & -7 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & 3 & -1 & 0 \\ -3 & 10 & -1 & 2 \\ 1 & -6 & 1 & -1 \\ -1 & -6 & 2 & 0 \end{pmatrix}$$



397.

$$\begin{pmatrix} 2 & 1 & 4 & 1 \\ 6 & 2 & 12 & 3 \\ 6 & 1 & 11 & 2 \\ 7 & 2 & 12 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & 4 & -4 & 3 \\ 3 & -1 & 0 & 0 \\ 7 & -3 & 3 & -2 \\ -10 & 5 & -4 & 2 \end{pmatrix}$$

398.

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 1 & 1 & 1 & 3 \\ 0 & -3 & 1 & -10 \\ 3 & 2 & 3 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & -1 & -1 & -1 \\ 2 & 7 & 0 & -3 \\ -4 & 1 & 1 & 1 \\ -1 & -2 & 0 & 1 \end{pmatrix}$$

399.

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

400.

$$\begin{pmatrix} 1 & 0 & 3 & 0 \\ 1 & 2 & 3 & 1 \\ 1 & 2 & 2 & 1 \\ 3 & -5 & 8 & -3 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -3 & 3 & 0 \\ -6 & 4 & -1 & 1 \\ 0 & 1 & -1 & 0 \\ 11 & -7 & 2 & -2 \end{pmatrix}$$

401.

$$\begin{pmatrix} 2 & 2 & -1 & 0 \\ 1 & 1 & 2 & 2 \\ 5 & 4 & 3 & 3 \\ 3 & 1 & 3 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & 11 & -9 & 5 \\ -14 & -16 & 13 & -7 \\ -9 & -10 & 8 & -4 \\ 11 & 13 & -10 & 5 \end{pmatrix}$$

402.

$$\begin{pmatrix} 3 & 2 & 1 & 3 \\ 8 & 5 & 2 & 8 \\ 1 & 1 & 2 & 0 \\ 5 & 2 & -4 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 3 & 1 & 0 \\ 14 & -7 & 4 & 2 \\ -3 & 2 & -2 & -1 \\ 0 & 1 & -3 & -1 \end{pmatrix}$$

403.

$$\begin{pmatrix} 2 & 2 & 0 & 1 \\ 3 & 3 & -1 & 2 \\ 3 & 4 & -3 & 3 \\ 10 & 8 & 7 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & 2 & -3 & -1 \\ 3 & -3 & 1 & 0 \\ -8 & 0 & 2 & 1 \\ -19 & 2 & 4 & 2 \end{pmatrix}$$

404.

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

405.

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

406.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 1 & 2 & 1 & 3 \\ 1 & 6 & 2 & 8 \\ 0 & 4 & 5 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 2 & -1 & 0 \\ 17 & 5 & -5 & 1 \\ 12 & 4 & -4 & 1 \\ -16 & -5 & 5 & -1 \end{pmatrix}$$

407.

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

408.

$$\begin{pmatrix} 3 & 0 & 3 & 2 \\ 3 & -1 & 3 & 3 \\ 4 & 2 & 4 & 1 \\ 4 & 5 & 5 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & 5 & 5 & -1 \\ -9 & 5 & 3 & 0 \\ 17 & -9 & -7 & 1 \\ -10 & 6 & 3 & 0 \end{pmatrix}$$

409.

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

410.

$$\begin{pmatrix} 0 & -1 & 0 & -1 \\ 1 & 4 & 1 & 4 \\ 2 & 3 & 3 & 3 \\ 2 & 6 & 4 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & 3 & -1 & 0 \\ -9 & -2 & 2 & -1 \\ -5 & -2 & 1 & 0 \\ 8 & 2 & -2 & 1 \end{pmatrix}$$

411.

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

412.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 4 & 4 & 5 & 5 \\ 3 & 2 & 5 & 4 \\ 6 & 7 & 6 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -5 & 2 & 1 \\ -4 & 4 & -2 & -1 \\ -3 & 3 & -1 & -1 \\ -1 & -2 & 1 & 1 \end{pmatrix}$$

413.

$$\begin{pmatrix} 1 & 1 & 3 & 5 \\ 2 & 3 & 7 & 10 \\ 4 & 0 & 6 & 17 \\ 4 & -4 & 1 & 15 \end{pmatrix}^{-1} = \begin{pmatrix} -17 & 11 & -5 & 4 \\ -2 & -3 & 5 & -3 \\ 0 & 4 & -5 & 3 \\ 4 & -4 & 3 & -2 \end{pmatrix}$$

414.

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

415.

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

416.

$$\begin{pmatrix} 1 & 3 & 3 & 1 \\ 0 & 1 & 1 & 1 \\ -1 & 8 & 9 & 6 \\ -3 & 1 & 2 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & -1 & -2 & 2 \\ -11 & 7 & 4 & -5 \\ 9 & -7 & -3 & 4 \\ 2 & 1 & -1 & 1 \end{pmatrix}$$

417.

$$\begin{pmatrix} 4 & 1 & 1 & 3 \\ 13 & 4 & 2 & 10 \\ 7 & 2 & 2 & 5 \\ -17 & -6 & 1 & -14 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -7 & 6 & -2 \\ -7 & 4 & -1 & 1 \\ -2 & 3 & -2 & 1 \\ -2 & 7 & -7 & 2 \end{pmatrix}$$

418.

$$\begin{pmatrix} 3 & 3 & 1 & 2 \\ 3 & 3 & 1 & 3 \\ 13 & 13 & 4 & 12 \\ 2 & 3 & 1 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 0 & 1 & 0 & -1 \\ 0 & -5 & 1 & 1 \\ 3 & 10 & -3 & 0 \\ -1 & 1 & 0 & 0 \end{pmatrix}$$

419.

$$\begin{pmatrix} -1 & 0 & -1 & 0 \\ 3 & 1 & 4 & 3 \\ 8 & 3 & 10 & 7 \\ 4 & 3 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & 15 & -7 & 2 \\ 3 & -11 & 5 & -1 \\ 3 & -15 & 7 & -2 \\ -1 & 9 & -4 & 1 \end{pmatrix}$$

420.

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

421.

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

422.

$$\begin{pmatrix} 1 & 1 & 3 & 0 \\ 2 & 2 & 7 & 0 \\ 3 & 4 & 7 & -1 \\ 2 & 2 & 4 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 8 & -3 & -1 & 1 \\ -1 & 0 & 1 & -1 \\ -2 & 1 & 0 & 0 \\ 6 & -2 & 0 & -1 \end{pmatrix}$$

423.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 3 & 4 & 3 \\ 2 & 0 & 1 & -1 \\ -5 & 1 & -3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 2 & 2 & 1 \\ 7 & -2 & 1 & 0 \\ 4 & -1 & -2 & -1 \\ -10 & 3 & 1 & 1 \end{pmatrix}$$

424.

$$\begin{pmatrix} 1 & 2 & 4 & 3 \\ 1 & 2 & 7 & 5 \\ 0 & 1 & 1 & 1 \\ 3 & 2 & 1 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 7 & -3 & -6 & -1 \\ -5 & 2 & 5 & 1 \\ -11 & 5 & 8 & 2 \\ 16 & -7 & -12 & -3 \end{pmatrix}$$

425.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 1 & 0 & 2 & 0 \\ -1 & 1 & -2 & 0 \\ 12 & 11 & 5 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -18 & -9 & -4 & 2 \\ 0 & 1 & 1 & 0 \\ 9 & 5 & 2 & -1 \\ 19 & 8 & 3 & -2 \end{pmatrix}$$

426.

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

427.

$$\begin{pmatrix} 0 & 0 & -1 & -1 \\ 1 & 1 & 4 & 3 \\ 2 & 2 & 17 & 14 \\ 3 & 2 & 13 & 11 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & -2 & 0 & 1 \\ -10 & 5 & -1 & -1 \\ 8 & -2 & 1 & 0 \\ -9 & 2 & -1 & 0 \end{pmatrix}$$

428.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 5 & 3 & 2 & 1 \\ 8 & 3 & 1 & -2 \\ -7 & -1 & 1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 0 & -1 & -1 \\ -9 & 3 & 1 & 2 \\ 9 & -5 & 2 & 0 \\ -1 & 2 & -2 & -1 \end{pmatrix}$$

429.

$$\begin{pmatrix} -2 & 3 & 3 & 0 \\ -5 & 8 & 8 & 0 \\ 0 & 1 & 2 & 1 \\ 3 & 1 & 5 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -8 & 3 & 0 & 0 \\ -19 & 7 & 3 & -1 \\ 14 & -5 & -3 & 1 \\ -9 & 3 & 4 & -1 \end{pmatrix}$$

430.

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

431.

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

432.

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

433.

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

434.

$$\begin{pmatrix} 0 & 1 & 1 & -1 \\ 1 & 0 & -1 & 4 \\ 4 & 6 & 3 & 8 \\ 2 & 2 & 0 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -10 & -7 & 1 & 2 \\ 5 & 2 & -1 & 1 \\ -2 & 0 & 1 & -2 \\ 2 & 2 & 0 & -1 \end{pmatrix}$$

435.

$$\begin{pmatrix} 3 & 2 & 0 & 4 \\ 4 & 3 & 0 & 5 \\ 0 & -2 & -2 & 3 \\ 4 & 3 & 1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -13 & 6 & 2 & 4 \\ 4 & -1 & -1 & -2 \\ 8 & -5 & -1 & -1 \\ 8 & -4 & -1 & -2 \end{pmatrix}$$

436.

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

437.

$$\begin{pmatrix} 1 & 3 & 2 & 1 \\ 3 & 10 & 7 & 4 \\ -4 & -7 & -2 & 1 \\ 3 & 6 & 3 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & -2 & 1 & 2 \\ -10 & 3 & -1 & -1 \\ 19 & -5 & 1 & 0 \\ -12 & 3 & 0 & 1 \end{pmatrix}$$

438.

$$\begin{pmatrix} 2 & 1 & 0 & 2 \\ 7 & 3 & 2 & 8 \\ 3 & 1 & 1 & 4 \\ -1 & 0 & 3 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} -13 & 7 & -8 & -2 \\ 13 & -6 & 6 & 2 \\ -2 & 1 & -1 & 0 \\ 7 & -4 & 5 & 1 \end{pmatrix}$$

439.

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

440.

$$\begin{pmatrix} 1 & 1 & 0 & 0 \\ 1 & 2 & 1 & 1 \\ 0 & 2 & -5 & 1 \\ 1 & 3 & -11 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 18 & -11 & 11 & -6 \\ -17 & 11 & -11 & 6 \\ -3 & 2 & -2 & 1 \\ 19 & -12 & 13 & -7 \end{pmatrix}$$

441.

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

442.

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

443.

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

444.

$$\begin{pmatrix} 2 & 2 & 1 & 0 \\ 2 & 3 & 0 & 0 \\ 3 & 3 & 2 & -1 \\ 14 & 16 & 6 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & 5 & 3 & -3 \\ -8 & -3 & -2 & 2 \\ -7 & -4 & -2 & 2 \\ -2 & -2 & -2 & 1 \end{pmatrix}$$

445.

$$\begin{pmatrix} 2 & 2 & 2 & 1 \\ 1 & 1 & 1 & 1 \\ 4 & 5 & 5 & 3 \\ 12 & 14 & 15 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 1 & -1 & 0 \\ 3 & -6 & 3 & -1 \\ -4 & 4 & -2 & 1 \\ -1 & 2 & 0 & 0 \end{pmatrix}$$

446.

$$\begin{pmatrix} 0 & 2 & 1 & 0 \\ 1 & -1 & 0 & 1 \\ 2 & 1 & 1 & 2 \\ 0 & 9 & 7 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & 9 & -4 & -1 \\ -1 & -2 & 1 & 0 \\ 3 & 4 & -2 & 0 \\ -12 & -10 & 5 & 1 \end{pmatrix}$$

447.

$$\begin{pmatrix} 1 & 0 & 1 & 0 \\ 2 & 1 & 2 & 2 \\ 5 & 1 & 5 & 3 \\ 1 & 1 & 0 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} 14 & 3 & -4 & 1 \\ 4 & 3 & -2 & 0 \\ -13 & -3 & 4 & -1 \\ -3 & -1 & 1 & 0 \end{pmatrix}$$

448.

$$\begin{pmatrix} 0 & 0 & 1 & 1 \\ 1 & 0 & 4 & 3 \\ 4 & -1 & 1 & -1 \\ 2 & -1 & 8 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & -1 & 1 & -1 \\ 15 & 0 & 1 & -2 \\ -14 & 2 & -1 & 1 \\ 15 & -2 & 1 & -1 \end{pmatrix}$$

449.

$$\begin{pmatrix} -1 & 0 & 0 & -1 \\ 2 & 3 & 2 & 1 \\ 1 & 3 & 1 & 1 \\ 5 & 5 & 7 & 0 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & 16 & -11 & -3 \\ 2 & 5 & -3 & -1 \\ -5 & -15 & 10 & 3 \\ -6 & -16 & 11 & 3 \end{pmatrix}$$

450.

$$\begin{pmatrix} 1 & 2 & 3 & 3 \\ 2 & 5 & 8 & 8 \\ 1 & 3 & 6 & 8 \\ 0 & 0 & 3 & 10 \end{pmatrix}^{-1} = \begin{pmatrix} 12 & -9 & 7 & -2 \\ -16 & 15 & -14 & 4 \\ 10 & -10 & 10 & -3 \\ -3 & 3 & -3 & 1 \end{pmatrix}$$

451.

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

452.

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

453.

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

454.

$$\begin{pmatrix} 1 & 0 & 2 & 1 \\ 3 & 0 & 5 & 3 \\ 3 & -1 & -1 & 2 \\ 1 & 2 & 9 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -5 & 2 & 1 \\ -4 & 0 & 1 & 1 \\ 3 & -1 & 0 & 0 \\ -14 & 7 & -2 & -1 \end{pmatrix}$$

455.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 2 & 2 & 1 & 5 \\ 4 & 2 & -4 & -9 \\ -1 & 0 & 3 & 9 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 3 & 0 & -1 \\ 5 & -1 & -1 & -1 \\ -8 & 7 & -3 & -6 \\ 2 & -2 & 1 & 2 \end{pmatrix}$$

456.

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

457.

$$\begin{pmatrix} 2 & 5 & 1 & -2 \\ 5 & 6 & 3 & 1 \\ 1 & -5 & 1 & 6 \\ 9 & 9 & 6 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} -9 & 8 & -3 & -2 \\ 13 & -8 & 5 & 1 \\ -16 & 6 & -7 & 1 \\ 15 & -9 & 6 & 1 \end{pmatrix}$$

458.

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

459.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ -2 & 1 & 1 & 1 \\ -1 & 7 & 3 & 7 \\ 0 & 0 & 1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -4 & -3 & 1 & 0 \\ -8 & -5 & 2 & -1 \\ -13 & -8 & 3 & 0 \\ 13 & 8 & -3 & 1 \end{pmatrix}$$

460.

$$\begin{pmatrix} 4 & 5 & 3 & 2 \\ 3 & 3 & 2 & 2 \\ 5 & 5 & 3 & 3 \\ 7 & 9 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -12 & 8 & -1 \\ -1 & 9 & -6 & 1 \\ 2 & -7 & 4 & -1 \\ -2 & 12 & -7 & 1 \end{pmatrix}$$

461.

$$\begin{pmatrix} 1 & 1 & 0 & 2 \\ 2 & 2 & 1 & 4 \\ 1 & 0 & -2 & 2 \\ 0 & 1 & -1 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 10 & -4 & -1 & -2 \\ 5 & -2 & -1 & 0 \\ -2 & 1 & 0 & 0 \\ -7 & 3 & 1 & 1 \end{pmatrix}$$

462.

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

463.

$$\begin{pmatrix} 0 & 1 & 1 & 0 \\ 1 & 4 & 1 & 0 \\ 3 & 7 & 4 & 1 \\ 0 & 4 & -1 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & -8 & 3 & 3 \\ 0 & 3 & -1 & -1 \\ 1 & -3 & 1 & 1 \\ -1 & 15 & -5 & -6 \end{pmatrix}$$

464.

$$\begin{pmatrix} 4 & 0 & 3 & 2 \\ 6 & 1 & 3 & 5 \\ -1 & 2 & -4 & 3 \\ 6 & 2 & 2 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 0 & 1 & -1 \\ 19 & -17 & 4 & 5 \\ 3 & -4 & 0 & 2 \\ -8 & 6 & -2 & -1 \end{pmatrix}$$

465.

$$\begin{pmatrix} 2 & 1 & 1 & 2 \\ 1 & 1 & 0 & 1 \\ 10 & 4 & 6 & 9 \\ 7 & 3 & 5 & 6 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 2 & 2 & -1 \\ 1 & 1 & -1 & 1 \\ 2 & -1 & -1 & 1 \\ 6 & -2 & -1 & 0 \end{pmatrix}$$

466.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 2 & 1 & 4 & 0 \\ 0 & -2 & 3 & -3 \\ 3 & 3 & 3 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 17 & -5 & 3 & -2 \\ -6 & 3 & -2 & 0 \\ -7 & 2 & -1 & 1 \\ -3 & 0 & 0 & 1 \end{pmatrix}$$

467.

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

468.

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

469.

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

470.

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

471.

$$\begin{pmatrix} 2 & 1 & 3 & 2 \\ 2 & 1 & 2 & 2 \\ 3 & 2 & 3 & 4 \\ -8 & -6 & -14 & -11 \end{pmatrix}^{-1} = \begin{pmatrix} -1 & 3 & -1 & 0 \\ -12 & 13 & -6 & -2 \\ 1 & -1 & 0 & 0 \\ 6 & -8 & 4 & 1 \end{pmatrix}$$

472.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ -1 & 1 & 1 & 0 \\ 3 & 2 & 3 & 4 \\ -3 & 3 & 2 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 6 & -1 & -1 & -1 \\ 16 & -3 & -3 & -2 \\ -10 & 3 & 2 & 1 \\ -5 & 0 & 1 & 1 \end{pmatrix}$$

473.

$$\begin{pmatrix} 2 & 1 & 1 & 1 \\ 3 & 2 & 2 & 1 \\ -4 & 0 & -1 & -4 \\ 4 & 1 & 3 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 13 & -7 & 2 & 1 \\ -6 & 4 & -1 & -1 \\ -8 & 4 & -1 & 0 \\ -11 & 6 & -2 & -1 \end{pmatrix}$$

474.

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

475.

$$\begin{pmatrix} 2 & 0 & 3 & 2 \\ 4 & 1 & 6 & 3 \\ 1 & -3 & 1 & 4 \\ 7 & -2 & 9 & 8 \end{pmatrix}^{-1} = \begin{pmatrix} -7 & 2 & 0 & 1 \\ -14 & 8 & 3 & -1 \\ 13 & -6 & -2 & 0 \\ -12 & 7 & 3 & -1 \end{pmatrix}$$

476.

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



477.

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

478.

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

479.

$$\begin{pmatrix} 0 & 1 & 2 & 1 \\ 1 & 2 & 2 & 1 \\ -1 & 1 & 8 & 3 \\ -4 & -2 & 9 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} 1 & -4 & 3 & -2 \\ -2 & 5 & -3 & 2 \\ -3 & 3 & -1 & 1 \\ 9 & -11 & 5 & -4 \end{pmatrix}$$

480.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 5 & 2 & 3 & 3 \\ 3 & 3 & 1 & 3 \\ 1 & 6 & -1 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 5 & 2 & -5 & 1 \\ 4 & 3 & -7 & 2 \\ -3 & 0 & 1 & 0 \\ -8 & -5 & 12 & -3 \end{pmatrix}$$

481.

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

482.

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

483.

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

484.

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

485.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 3 & -1 & 2 & 2 \\ -1 & 3 & 1 & 4 \\ 0 & 2 & 1 & 5 \end{pmatrix}^{-1} = \begin{pmatrix} -13 & 6 & 4 & -3 \\ -11 & 5 & 4 & -3 \\ 12 & -5 & -3 & 2 \\ 2 & -1 & -1 & 1 \end{pmatrix}$$

486.

$$\begin{pmatrix} 0 & 1 & 1 & 1 \\ 1 & 1 & 0 & 1 \\ 2 & 3 & 0 & 2 \\ 1 & 0 & -3 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 0 & 1 & -1 \\ 0 & -2 & 1 & 0 \\ -2 & -1 & 1 & -1 \\ 3 & 3 & -2 & 1 \end{pmatrix}$$

487.

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

488.

$$\begin{pmatrix} 2 & 1 & 1 & 1 \\ 3 & 1 & 2 & 1 \\ 8 & 4 & 4 & 3 \\ 0 & 3 & -4 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} -6 & 7 & -1 & 1 \\ 4 & -8 & 2 & -1 \\ 5 & -6 & 1 & -1 \\ 4 & 0 & -1 & 0 \end{pmatrix}$$

489.

$$\begin{pmatrix} 0 & 0 & -1 & 2 \\ 1 & 1 & 0 & 1 \\ 3 & 4 & 1 & 3 \\ 2 & 0 & -5 & 7 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 12 & -3 & -1 \\ -5 & -19 & 5 & 2 \\ 5 & 16 & -4 & -2 \\ 3 & 8 & -2 & -1 \end{pmatrix}$$

490.

$$\begin{pmatrix} 0 & 1 & 0 & 1 \\ 0 & 5 & 3 & 0 \\ 1 & 4 & 3 & 0 \\ 3 & -1 & 2 & -1 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & -8 & 10 & -3 \\ -3 & -7 & 9 & -3 \\ 5 & 12 & -15 & 5 \\ 4 & 7 & -9 & 3 \end{pmatrix}$$

491.

$$\begin{pmatrix} 1 & 0 & 1 & 1 \\ 2 & 2 & 3 & 3 \\ 3 & 1 & 3 & 3 \\ -1 & 3 & 2 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & -1 & 2 & 0 \\ -3 & 0 & 1 & 0 \\ 2 & -2 & 1 & 1 \\ 2 & 3 & -3 & -1 \end{pmatrix}$$

492.

$$\begin{pmatrix} 1 & 1 & 0 & 1 \\ 1 & 2 & -1 & 2 \\ 6 & 9 & -3 & 8 \\ 9 & 12 & -2 & 13 \end{pmatrix}^{-1} = \begin{pmatrix} 11 & 5 & -1 & -1 \\ -13 & -8 & 2 & 1 \\ -9 & -6 & 1 & 1 \\ 3 & 3 & -1 & 0 \end{pmatrix}$$

493.

$$\begin{pmatrix} 1 & 2 & 4 & 2 \\ 1 & 0 & 1 & 0 \\ -1 & 6 & 9 & 5 \\ -1 & 3 & 3 & 3 \end{pmatrix}^{-1} = \begin{pmatrix} -3 & 6 & 0 & 2 \\ -10 & 16 & 1 & 5 \\ 3 & -5 & 0 & -2 \\ 6 & -9 & -1 & -2 \end{pmatrix}$$

494.

$$\begin{pmatrix} 1 & 3 & 2 & 0 \\ 2 & 9 & 5 & 1 \\ 0 & -1 & -1 & 0 \\ 3 & 13 & 7 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 1 & 2 & -1 \\ -1 & -1 & 0 & 1 \\ 1 & 1 & -1 & -1 \\ 0 & 3 & 1 & -2 \end{pmatrix}$$

495.

$$\begin{pmatrix} 1 & 1 & 1 & 1 \\ 5 & 4 & 5 & 6 \\ 5 & 2 & 4 & 5 \\ 14 & 4 & 10 & 13 \end{pmatrix}^{-1} = \begin{pmatrix} 2 & 0 & -3 & 1 \\ 1 & 1 & -4 & 1 \\ 2 & -3 & 11 & -3 \\ -4 & 2 & -4 & 1 \end{pmatrix}$$

496.

$$\begin{pmatrix} 1 & 1 & 0 & -1 \\ 1 & 3 & 3 & 0 \\ -1 & 2 & 5 & 3 \\ 0 & 5 & 5 & 1 \end{pmatrix}^{-1} = \begin{pmatrix} 9 & -5 & 3 & 0 \\ 7 & -5 & 2 & 1 \\ -10 & 7 & -3 & -1 \\ 15 & -10 & 5 & 1 \end{pmatrix}$$

497.

$$\begin{pmatrix} 0 & 2 & 3 & 1 \\ 1 & 5 & 6 & 2 \\ 0 & 1 & 0 & -3 \\ 1 & 9 & 11 & 2 \end{pmatrix}^{-1} = \begin{pmatrix} 13 & 10 & 5 & -9 \\ -15 & -9 & -5 & 9 \\ 12 & 7 & 4 & -7 \\ -5 & -3 & -2 & 3 \end{pmatrix}$$

498.

$$\begin{pmatrix} 1 & 1 & 2 & 1 \\ 1 & 1 & 1 & 1 \\ 0 & 0 & -1 & 1 \\ 6 & 5 & 2 & 4 \end{pmatrix}^{-1} = \begin{pmatrix} 4 & -9 & 1 & 1 \\ -6 & 12 & -2 & -1 \\ 1 & -1 & 0 & 0 \\ 1 & -1 & 1 & 0 \end{pmatrix}$$

499.

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

500.

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