

Name \_\_\_\_\_

Date \_\_\_\_\_

Year Group \_\_\_\_\_

**Fill out all the steps for the determinant of matrix A**

$$A = \begin{bmatrix} 5 & 2 \\ 4 & 3 \end{bmatrix}$$

1.  $\underline{\quad} * \underline{\quad} - \underline{\quad} * \underline{\quad}$   
 $\underline{\quad} - \underline{\quad}$   
 $\underline{\quad}$

**Find the determinant of the following matrices below**

$$B = \begin{bmatrix} -1 & 2 \\ 4 & -7 \end{bmatrix} \quad C = \begin{bmatrix} -5 & -4 \\ 6 & 3 \end{bmatrix} \quad D = \begin{bmatrix} 3 & 8 \\ -4 & -3 \end{bmatrix}$$

2. Determinant of B = \_\_\_\_\_

3. Determinant of C = \_\_\_\_\_

4. Determinant of D = \_\_\_\_\_

**Fill out the missing element in the matrix**

5. The determinant of E is 2. If the matrix of  $E = \begin{bmatrix} 7 & 3 \\ \underline{\quad} & 2 \end{bmatrix}$ , find the missing element.

Answer =  $E = \begin{bmatrix} 7 & 3 \\ \underline{\quad} & 2 \end{bmatrix}$

6. The determinant of E is  $-4$ . If the matrix of  $E = \begin{bmatrix} -6 & \underline{\quad} \\ 2 & 3 \end{bmatrix}$ , find the missing element.

Answer =  $E = \begin{bmatrix} -6 & \underline{\quad} \\ 2 & 3 \end{bmatrix}$