

Name \_\_\_\_\_

Date \_\_\_\_\_

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

Fill out the steps to find determinant of the matrix using the first row

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

$$\underline{\quad} * \begin{vmatrix} \underline{\quad} & \underline{\quad} \\ \underline{\quad} & \underline{\quad} \end{vmatrix} - \underline{\quad} * \begin{vmatrix} \underline{\quad} & \underline{\quad} \\ \underline{\quad} & \underline{\quad} \end{vmatrix} + \underline{\quad} * \begin{vmatrix} \underline{\quad} & \underline{\quad} \\ \underline{\quad} & \underline{\quad} \end{vmatrix}$$

Answer = \_\_\_\_

Find the minor and cofactors of the matrix below

Matrix  $B = \begin{bmatrix} -2 & 3 & 2 \\ 5 & 4 & 0 \\ 1 & -7 & 6 \end{bmatrix}$

2.  $M_{1,1} = \underline{\quad}$  cofactor of  $B_{1,1} = \underline{\quad}$

3.  $M_{2,2} = \underline{\quad}$  cofactor of  $B_{2,2} = \underline{\quad}$

4.  $M_{3,2} = \underline{\quad}$  cofactor of  $B_{3,2} = \underline{\quad}$

Right out the only determinant when using the second row to break down the determinant of the matrix

5. Matrix  $C = \begin{bmatrix} 2 & 4 & 3 \\ 0 & -5 & 0 \\ 6 & 0 & -1 \end{bmatrix}$

$$\underline{\quad} * \begin{vmatrix} \underline{\quad} & \underline{\quad} \\ \underline{\quad} & \underline{\quad} \end{vmatrix}$$

Answer = \_\_\_\_