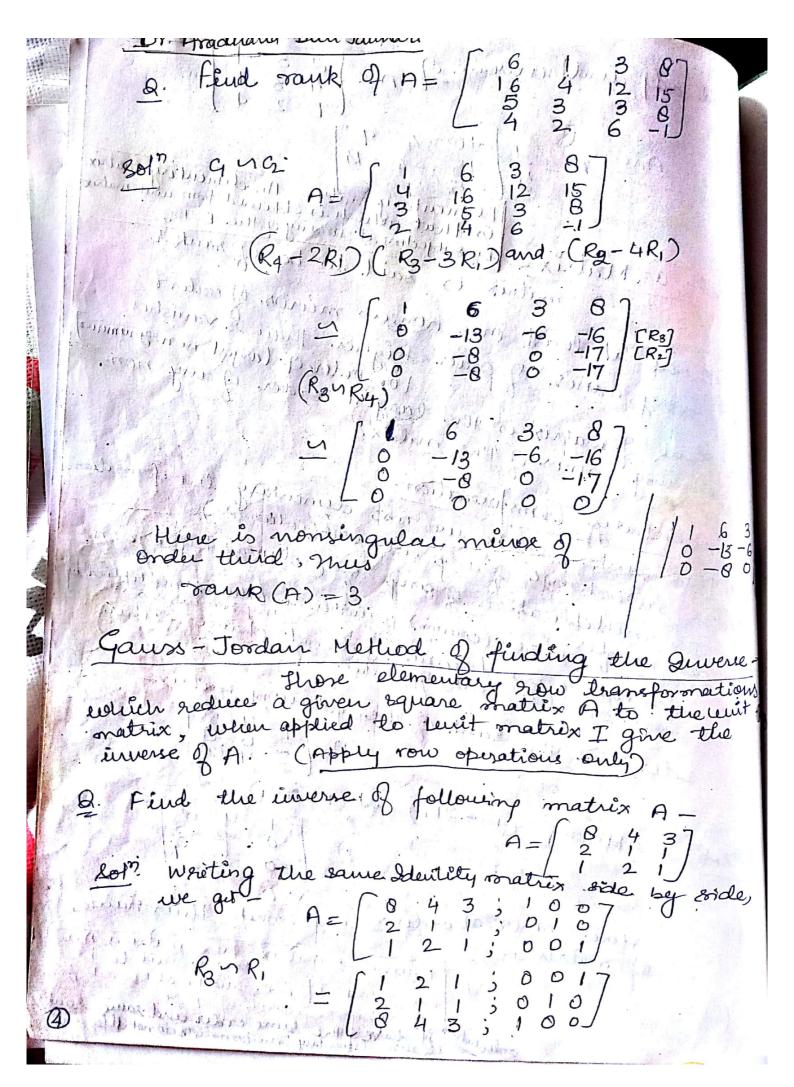
find adj and inverse of Aradhana Dutt Tambari Ans. $A^{\dagger} = \frac{1}{5} \begin{vmatrix} -10 & 4 & 9 \\ -5 & -4 & -14 \end{vmatrix}$ Elementary matrix - An elementary matrix is that, which is obtained from whit matrix Matrex - by subjecting it to any of the E.T. A matrix is said to be of rank & (i) It has at least one nonzero menor of order or (ii) Every minor of order higher than i vanishes l'or order of largest mon-zen mins Rank of matrix is the largest order of any non-vanishing minor of the matrix. Elementary Transformation To find rank of matrix eve use elementary transformation. 1) The interchange of any two rows (columns) The multiplication of any now (column) by a non. 3 Addition to one now (column) of another now (column) multiplied by The elementary transformations donot change either the order or the rank of Matrix. Determine the rank of the following matrix-Applying (R2-2R1) and (Rg-3R1) Here minor of order 3 is formed thuis nauk Equivalent matrix- Two matrices A and B are said to be of matrix is 3 equivalent if one con be obtained from other by sequence of E. To some sank It have the toursformations do not alter its



$$\begin{array}{c} R_{3} - 8R_{1} & (R_{2} - 2R_{1}) & Dr. Aradham Dutt Jauhani \\ R_{3} - 4R_{2} & 0 & 1 - 2 \\ 0 & -12 - 5; & 10 - 8 \\ R_{3} - 4R_{2} & 0 & 1 \\ 0 & 0 & 1; & 1 - 43 \\ 0 & 0$$

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