

$$A = \begin{bmatrix} -3 & 4 & 1 \\ 0 & 2 & -2 \\ 3 & -2 & 1 \end{bmatrix} \text{ จงหา } \text{adj}(A) \text{ และ } A^{-1}$$

หา $\det(A)$

$$\det(A) = \begin{vmatrix} -3 & 4 & 1 \\ 0 & 2 & -2 \\ 3 & -2 & 1 \end{vmatrix} \begin{matrix} ______ \\ ______ \\ ______ \end{matrix} = ______ - ______ = ______$$

หา $\text{adj}(A)$

$$\text{จาก } \text{adj}(A) = \begin{bmatrix} ______ & ______ & ______ \\ ______ & ______ & ______ \\ ______ & ______ & ______ \end{bmatrix}^t$$

หาโคแฟกเตอร์

$$C_{11} = (-1)^{1+1}(______) = ______$$

$$C_{12} = (-1)^{1+2}(______) = ______$$

$$C_{13} = (-1)^{1+3}(______) = ______$$

$$C_{21} = (-1)^{2+1}(______) = ______$$

$$C_{22} = (-1)^{2+2}(______) = ______$$

$$C_{23} = (-1)^{2+3}(______) = ______$$

$$C_{31} = (-1)^{3+1}(______) = ______$$

$$C_{32} = (-1)^{3+2}(______) = ______$$

$$C_{33} = (-1)^{3+3}(______) = ______$$

$$\text{จะได้ } \text{cof}(A) = \begin{bmatrix} ______ & ______ & ______ \\ ______ & ______ & ______ \\ ______ & ______ & ______ \end{bmatrix}$$

ดังนั้น

$$\text{adj}(A) = (\text{cof}(A))^t = \begin{bmatrix} ______ & ______ & ______ \\ ______ & ______ & ______ \\ ______ & ______ & ______ \end{bmatrix}$$

$$\text{จาก } A^{-1} = \frac{1}{\det(A)} \text{adj}(A)$$

$$\text{จะได้ } A^{-1} = \frac{1}{______} \begin{bmatrix} ______ & ______ & ______ \\ ______ & ______ & ______ \\ ______ & ______ & ______ \end{bmatrix}$$