

③ Transpose the matrix

④

$$\begin{bmatrix} 8 & 7 & 3 \\ -6 & 2 & 5 \\ -7 & -17 & 1 \end{bmatrix}$$

④ Divide by the determinant 29

$$\begin{pmatrix} x \\ y \\ z \end{pmatrix} = \frac{1}{29} \begin{bmatrix} 8 & 7 & 3 \\ -6 & 2 & 5 \\ -7 & -17 & 1 \end{bmatrix} \begin{pmatrix} -12 \\ 10 \\ -1 \end{pmatrix}$$

$$= \frac{1}{29} \begin{pmatrix} -96 + 70 - 3 \\ +72 + 20 - 5 \\ +84 - 170 - 1 \end{pmatrix} = \begin{pmatrix} -1 \\ +57/29 \\ -87/29 \end{pmatrix} = \begin{pmatrix} -1 \\ 3 \\ -3 \end{pmatrix}$$