$$R \sim \begin{bmatrix} 1 & 0 & -4 & 28 & 37 & -13 \\ 0 & 1 & -2 & -12 & -16 & 5 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

There are two nonzero Rows (or equivalently two leading 1's). The Row space and column space are both Two dimensional.

So Rank(A) = 2.

⇒ For Nullity :-

$$x_1 - 4x_3 + 28x_4 + 37x_5 - 13x_6 = 0$$

$$x_2 - 2x_3 - 12x_4 - 16x_5 + 5x_6 = 0$$

$$x_1 = 4x_3 - 28x_4 - 37x_5 + 13x_6$$

$x_3 = r$, $x_4 = s$, $x_5 = t$, $x_6 = u$

$$\boxed{x_1 = 4r - 28s - 37t + 13u}$$

$$x_2 = 2x_3 + 12x_4 + 16x_5 - 5x_6$$

$$\boxed{x_2 = 2r + 12s + 16t - 5u}$$

$$\begin{bmatrix} x_1 \\ x_2 \\ x_3 \\ x_4 \\ x_5 \\ x_6 \end{bmatrix} = \begin{bmatrix} 4r - 28s - 37t + 13u \\ 2r + 12s + 16t - 5u \\ r \\ s \\ t \\ u \end{bmatrix}$$