

Step-1

The two independent vectors in the plane $x + 2y - 3z - t = 0$ are $(1, 0, 0, 1), (0, 3, 2, 0)$.

The three independent vectors in the plane $x + 2y - 3z - t = 0$ are $(1, 0, 0, 1), (0, 3, 2, 0), (1, 1, 1, 0)$.

(All vectors above satisfy the equations $x + 2y - 3z - t = 0$).

Step-2

Four vectors are not linearly independent because the number of maximally independent vectors of the plane is three. Or dimension of the plane is three.

$$A = \begin{bmatrix} 1 & 2 & -3 & -1 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 \end{bmatrix}$$

The null space of A is $\boxed{x + 2y - 3z - t = 0}$.