Are the vectors $\begin{bmatrix} 1 \\ -5 \\ -1 \\ -1 \end{bmatrix}$, $\begin{bmatrix} -2 \\ 4 \\ -2 \\ 2 \end{bmatrix}$, $\begin{bmatrix} 4 \\ -3 \\ -1 \\ 5 \end{bmatrix}$ and $\begin{bmatrix} -17 \\ 0 \\ 2 \\ -28 \end{bmatrix}$ linearly independent? Choose

☐ linearly dependent

☐ linearly independent

If they are linearly dependent, find scalars that are not all zero such that the equation below is true. If they are linearly independent, find the only scalars that will make the equation below true.

$$\square \begin{bmatrix} 1 \\ -5 \\ -1 \\ -1 \end{bmatrix} + \square \begin{bmatrix} -2 \\ 4 \\ -2 \\ 2 \end{bmatrix} + \square \begin{bmatrix} 4 \\ -3 \\ -1 \\ 5 \end{bmatrix} + \square \begin{bmatrix} -17 \\ 0 \\ 2 \\ -28 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}.$$

Are the vectors $\begin{bmatrix} 1 \\ -5 \\ -1 \\ -1 \end{bmatrix}$, $\begin{bmatrix} -2 \\ 4 \\ -2 \\ 2 \end{bmatrix}$, $\begin{bmatrix} 4 \\ -3 \\ -1 \\ 5 \end{bmatrix}$ and $\begin{bmatrix} -17 \\ 0 \\ 2 \\ -28 \end{bmatrix}$ linearly independent? Choose

[✓] linearly dependent

[ ] linearly independent

If they are linearly dependent, find scalars that are not all zero such that the equation below is true. If they are linearly independent, find the only scalars that will make the equation below true.

$$\boxed{-3}\begin{bmatrix} 1 \\ -5 \\ -1 \\ -1 \end{bmatrix} + \boxed{0}\begin{bmatrix} -2 \\ 4 \\ -2 \\ 2 \end{bmatrix} + \boxed{5}\begin{bmatrix} 4 \\ -3 \\ -1 \\ 5 \end{bmatrix} + \boxed{1}\begin{bmatrix} -17 \\ 0 \\ 2 \\ -28 \end{bmatrix} = \begin{bmatrix} 0 \\ 0 \\ 0 \\ 0 \end{bmatrix}.$$