

Which of the following sets of vectors are linearly independent? (Check the boxes for linearly independent sets.)

$A = \left\{ \begin{bmatrix} 6 \\ -8 \end{bmatrix} \right\}$

$B = \left\{ \begin{bmatrix} -4 \\ -7 \\ 0 \end{bmatrix}, \begin{bmatrix} -5 \\ 6 \\ 0 \end{bmatrix}, \begin{bmatrix} -8 \\ 2 \\ 0 \end{bmatrix} \right\}$

$C = \left\{ \begin{bmatrix} -9 \\ 3 \\ 5 \end{bmatrix}, \begin{bmatrix} 4 \\ 9 \\ 7 \end{bmatrix}, \begin{bmatrix} 5 \\ -12 \\ -12 \end{bmatrix} \right\}$

$D = \left\{ \begin{bmatrix} 0 \\ 0 \end{bmatrix}, \begin{bmatrix} -9 \\ -7 \end{bmatrix} \right\}$

$E = \left\{ \begin{bmatrix} 8 \\ 1 \\ -2 \end{bmatrix}, \begin{bmatrix} -1 \\ -6 \\ -3 \end{bmatrix} \right\}$

$F = \left\{ \begin{bmatrix} 5 \\ 4 \end{bmatrix}, \begin{bmatrix} 9 \\ 7 \end{bmatrix}, \begin{bmatrix} -3 \\ -2 \end{bmatrix} \right\}$

Which of the following sets of vectors are linearly independent? (Check the boxes for linearly independent sets.)

$$\input checked="" type="checkbox"/> $A = \left\{ \begin{bmatrix} 6 \\ -8 \end{bmatrix} \right\}$$$

$$\input type="checkbox"/> $B = \left\{ \begin{bmatrix} -4 \\ -7 \\ 0 \end{bmatrix}, \begin{bmatrix} -5 \\ 6 \\ 0 \end{bmatrix}, \begin{bmatrix} -8 \\ 2 \\ 0 \end{bmatrix} \right\}$$$

$$\input type="checkbox"/> $C = \left\{ \begin{bmatrix} -9 \\ 3 \\ 5 \end{bmatrix}, \begin{bmatrix} 4 \\ 9 \\ 7 \end{bmatrix}, \begin{bmatrix} 5 \\ -12 \\ -12 \end{bmatrix} \right\}$$$

$$\input type="checkbox"/> $D = \left\{ \begin{bmatrix} 0 \\ 0 \end{bmatrix}, \begin{bmatrix} -9 \\ -7 \end{bmatrix} \right\}$$$

$$\input checked="" type="checkbox"/> $E = \left\{ \begin{bmatrix} 8 \\ 1 \\ -2 \end{bmatrix}, \begin{bmatrix} -1 \\ -6 \\ -3 \end{bmatrix} \right\}$$$

$$\input type="checkbox"/> $F = \left\{ \begin{bmatrix} 5 \\ 4 \end{bmatrix}, \begin{bmatrix} 9 \\ 7 \end{bmatrix}, \begin{bmatrix} -3 \\ -2 \end{bmatrix} \right\}$$$