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Show all work. 5 points each.

1. Show row reduced echelon form (rref) of matrix and find the general solution of the system whose augmented matrix is

$$\begin{bmatrix} 0 & 1 & -6 & 5 \\ 1 & -2 & 7 & -6 \end{bmatrix}$$

2. Is  $\mathbf{b}$  a linear combination of the columns of  $A$ ? Explain and show the rref of matrix.

$$\mathbf{b} = \begin{bmatrix} 3 \\ -7 \\ -3 \end{bmatrix} \quad \begin{bmatrix} 1 & -4 & 2 \\ 0 & 3 & 5 \\ -2 & 8 & -4 \end{bmatrix}$$