

$$\begin{bmatrix} a_1 \\ a_2 \\ a_3 \\ \vdots \\ a_n \end{bmatrix} \xrightarrow[\begin{matrix} \leftarrow F^{-1} \end{matrix}]{\begin{matrix} \rightarrow F \end{matrix}} \begin{matrix} a_1 * \text{[red wavy line]} \\ + \\ a_2 * \text{[blue wavy line]} \\ + \\ a_3 * \text{[green wavy line]} \\ + \vdots + \\ a_n * \text{[orange wavy line]} \end{matrix} = \text{[brown jagged line]}$$

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