

$$\begin{bmatrix} a_1 \\ a_2 \\ a_3 \\ \vdots \\ a_n \end{bmatrix} \xrightarrow{\quad F \quad} \begin{array}{c} a_1 * \text{ red wavy line } \\ + \\ a_2 * \text{ blue wavy line } \\ + \\ a_3 * \text{ green wavy line } \\ \vdots \\ + \\ a_n * \text{ yellow wavy line } \end{array} = \text{ orange jagged line } \xrightarrow{\quad \vec{s} \quad}$$