

Diagram illustrating matrix multiplication:

A square matrix \mathbf{G} of size $(m \times n)$ is multiplied by a column vector \mathbf{m} of size $(n \times 1)$, resulting in a column vector \mathbf{d} of size $(m \times 1)$.

$$\begin{matrix} \boxed{\mathbf{G}} & \boxed{\mathbf{m}} & = & \boxed{\mathbf{d}} \\ (m \times n) & (n \times 1) & & (m \times 1) \end{matrix}$$