$$M\dot{u} = -Au + N + D$$

$$A := \int_\Omega \nabla \varphi_i \cdot \nabla \varphi_j$$

$$M := \int_\Omega \varphi_i \varphi_j$$

$$N := \int_{\partial\Omega_N} g \varphi_j$$

$$D := -\sum_i \int (d_i \nabla \varphi_i \cdot \nabla \varphi_j) + \sum_i \int d_i \varphi_i \varphi_j$$

the non-zero one

the none-zero one