

$$\left\{ \begin{array}{l} \int_{\Omega} \operatorname{div} \underline{\underline{\sigma}} = \underline{f} \quad \text{in } \Omega \\ \underline{\underline{\sigma}} \underline{n} = \underline{g} \quad \text{on } \partial\Omega \end{array} \right.$$

$$\int_{\Omega} \underline{\underline{\sigma}} : \nabla \underline{u} - \underbrace{\int_{\partial\Omega} \underline{\underline{\sigma}} \underline{n} \cdot \underline{u}}_{= \int_{\partial\Omega} \underline{g} \cdot \underline{u}} = \int_{\Omega} \underline{f} \cdot \underline{u}$$
