

# Practice on stresses and static admissibility

Let us consider the continuum body  $\Omega$  in its present configuration where

$$\Omega = \{0 \leq x_1 \leq a; 0 \leq x_2 \leq b; 0 \leq x_3 \leq b; \} \quad (1)$$

and  $\partial\Omega$  is boundaries of the domain  $\Omega$ .

**Question 1:** What are the surface tractions over the boundary  $\partial\Omega$  when the stress state is  $\underline{\underline{\sigma}} = a(\underline{e}_3 \times \underline{e}_3)$ ?

**Question 2:** What are the surface tractions over the boundary  $\partial\Omega$  when the stress state is  $\underline{\underline{\sigma}}(\underline{x}) = \tau(\underline{e}_1 \otimes \underline{e}_3 + \underline{e}_3 \otimes \underline{e}_1)$ ?