

Determine the temperature distribution for the steady state in the 2D domain in the figure. For the solution, use triangular elements with linear approximation functions. The thick lines denote insulated boundaries (with zero heat flux). Heat transfer is prescribed on vertical boundaries with transfer coefficient $\alpha = 4 \text{ W/K/m}^2$. Conductivity coefficient is $\lambda = 5 \text{ W/m/K}$. Nodal temperatures $T_1, T_5, T_9, T_{13}, T_4, T_8, T_{12}$, and T_{16} will be checked.

