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## Analytical solution of the boundary value problems of elasticity for the infinite body with parabolic notch

Analytical (exact) solutions of 2D problems of elasticity are constructed in the parabolic coordinates. Here represent external boundary value problems of elastic equilibrium of the homogeneous isotropic body bounded by coordinate lines of the parabolic coordinate system, when on parabolic border are given normal or tangential stresses. The exact solutions is obtained by the separation variables method. Using the MATLAB software are obtained numerical results and constructed graphs of the mentioned boundary value problems.