THE SOLUTION OF ONE PROBLEM BY METHOD OF I. VEKUA FOR APPROXIMATION N=2

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In the present paper the infinite plate with circular hole, when the elastic circular body put in the hole is solved. We consider following case: a) the circular body put in the hole; b) the circular body put in the hole and soldered to the contour of the plate. The boundary value problem by means of I. Vekua's method for approximation N=2 is solved. Using of general representation of the solutions by means of complex variable and metaharmonic functions and the method of series is obtained efective solutions. Obtained results are compared to the solutions obtained by plane elasticity theory.