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Short title: Numerical solution of three-point difference equations on the basis of a combination of the reduction method and the conjugate gradient method.

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Review text:

Linear problem $Ax=b$ is considered where x is unknown and where A is a block-tridiagonal N -dimensional matrix with all of its off-diagonal submatrices equal to the same negative unit matrix and with the same diagonal submatrix element C only replaced by the unit submatrix in the upper and lower corner of A . A two-step algorithm is proposed for the numerical solution of the system reducing the procedure to the usual conjugate-gradient method.