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Isom Jurayev* (ijurayev@yahoo.com), 10021 Whitemark Lane, Cary, NC 27511. *Gauss Elimination is the Best.*

We consider a variation of the Gauss Elimination for solving Linear Systems. Here we would like to note only the following of its important features: by the number of operations performed is the best method; no observed accumulation of rounding errors; no need to calculate the determinant; easily adapted to parallelization. The theoretical findings are confirmed by numerical experiment conducted on the basis of IDE Borland Turbo C + + Explorer Edition for Windows. In particular, even for ILL - Conditioned Linear Equations with Hilbert matrix [1] of order 250, we obtained an expected solution. [1] J. H. Wilkinson, The Solution of ILL - Conditioned Linear Equations, p.65-94, A. Ralston and H. S. Wilf, Mathematical Methods for Digital Computers, vol.II, Wiley (1967). (Received January 19, 2011)