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"Parallel Methods of Solving the Linear Equation Systems"

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Практична частина

Test Number	System Size	Serial algorithm	Parallel algorithm					
			2 processors		4 processors		8 processors	
			Time	Speed Up	Time	Speed up	Time	Speed up
1	10	0.000000	0.000489	**0.000000**	0.001898	**0.000000**	0.015837	**0.000000**
2	100	0.001000	0.001330	**0.7518**	0.002283	**0.438**	0.034669	**0.028**
3	500	0.112000	0.076545	**1.4631**	0.054760	**2.0452**	0.057509	**1.9475**
4	1000	0.905000	0.600180	**1.5078**	0.387238	**2.337**	0.346260	**2.6136**
5	1500	3.146000	2.149988	**1.4632**	1.510323	**2.0829**	0.855631	**3.6768**
6	2000	7.462000	5.001163	**1.4921**	3.972145	**1.8785**	1.703038	**4.3815**
7	2500	14.604000	9.752257	**1.4974**	7.169063	**2.037**	2.976438	**4.9**
8	3000	25.591000	16.872668	**1.5167**	12.978134	**1.9718**	5.968315	**4.2878**

System Size	2 processors		4 processors		8 processors	
	Model	Experiment	Model	Experiment	Model	Experiment
10	0.00005	0.000489	0.000025	0.001898	0.000012	0.015837
100	0.0019329	0.001330	0.00096	0.002283	0.00048	0.034669
500	0.158371	0.076545	0.0791857	0.054760	0.0395929	0.057509
1000	1.01413	0.600180	0.507066	0.387238	0.253533	0.346260
1500	2.48805	2.149988	1.24402	1.510323	0.622012	0.855631
2000	5.33757	5.001163	2.66878	3.972145	1.33439	1.703038
2500	10.3397	9.752257	5.16985	7.169063	2.58493	2.976438
3000	20.2724	16.872668	10.1362	12.978134	5.06811	5.968315