Matrix size	NP	Serial Time (s)	Parallel Time	Speedup	Theoretical Speedup (Amdahl's Law)	Amdahl's Speedup
1000 * 2000* 3000	8	1.88749	0.6191725	3.04840735	3.149606299	0.9678693337
2000 * 3000 * 4000	8	7.54197	2.4954585	3.022278271	3.149606299	0.9595733509
3000 * 4000 * 5000	8	19.1673	6.415225	2.987782969	3.149606299	0.9486210928
4000 * 5000 * 6000	8	38.3352	12.8713625	2.978332713	3.149606299	0.9456206365
5000 * 6000 * 7000	8	69.3178	24.538465	2.824862924	3.149606299	0.8968939785
6000 * 7000 * 8000	8	107.379	38.0928325	2.818876753	3.149606299	0.8949933692
7000 * 8000 * 9000	8	159.93	57.777775	2.768019364	3.149606299	0.878846148

Matrix size	NP	Serial Time (s)	Parallel Time	Speedup	Theoretical Speedup (Amdahl's Law)	Amdahl's Speedup
1000 * 2000* 3000	12	1.88749	0.6327	2.983230599	3.50877193	0.8502207207
2000 * 3000 * 4000	12	7.54197	2.518788235	2.994285067	3.50877193	0.8533712441
3000 * 4000 * 5000	12	19.1673	6.326582353	3.029645222	3.50877193	0.8634488884
4000 * 5000 * 6000	12	38.3352	12.6535	3.02961236	3.50877193	0.8634395227
5000 * 6000 * 7000	12	69.3178	23.84191765	2.907391974	3.50877193	0.8286067124
6000 * 7000 * 8000	12	107.379	37.00354706	2.901856944	3.50877193	0.8270292292
7000 * 8000 * 9000	12	159.93	59.62358824	2.682327661	3.50877193	0.7644633835

Matrix size	NP	Serial Time (s)	Parallel Time	Speedup	Theoretical Speedup (Amdahl's Law)	Amdahl's Speedup
1000 * 2000* 3000	16	1.88749	1.0342625	1.824962232	3.720930233	0.4904585997
2000 * 3000 * 4000	16	7.54197	4.153825	1.815668691	3.720930233	0.4879609607
3000 * 4000 * 5000	16	19.1673	10.82022625	1.77143246	3.720930233	0.4760724735
4000 * 5000 * 6000	16	38.3352	41.6050625	0.9214071004	3.720930233	0.2476281582
5000 * 6000 * 7000	16	69.3178	86.258425	0.8036061405	3.720930233	0.2159691503
6000 * 7000 * 8000	16	107.379	185.7162125	0.5781886167	3.720930233	0.1553881907
7000 * 8000 * 9000	16	159.93	263.962375	0.6058818042	3.720930233	0.1628307349

size	np	time			
3000 * 4000 * 5000	4	9.926582353			
3000 * 4000 * 5000	8	6.415225			
3000 * 4000 * 5000	10	6.016582353			
3000 * 4000 * 5000	12	6.326582353			
3000 * 4000 * 5000	16	10.82022625			

time vs np
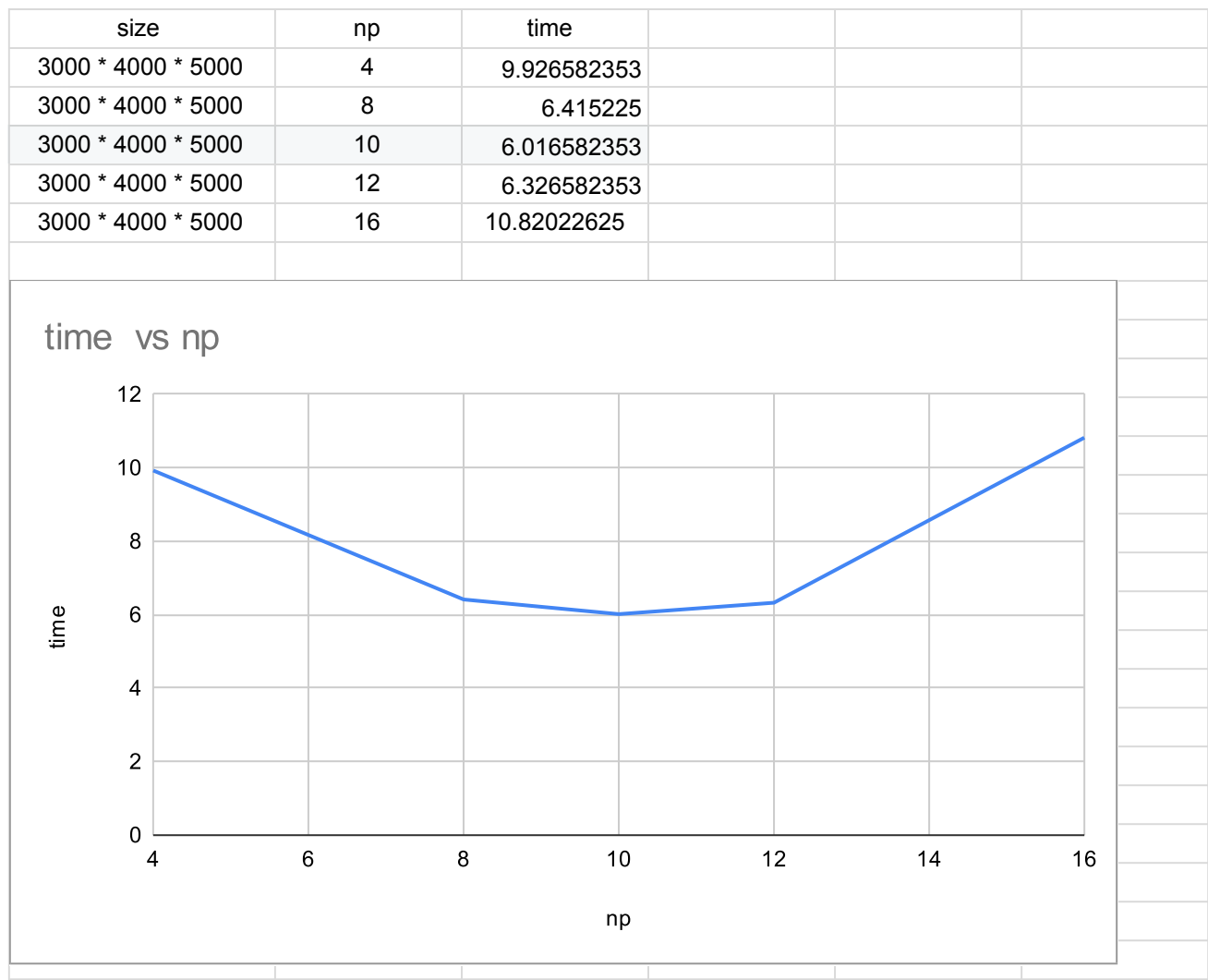
size	np	time			
3000 * 4000 * 5000	4	9.926582353			
4000 * 6000 * 5000	8	13.548766			
5000 * 6000 * 5000	10	16.642391			
6000 * 6000 * 5000	12	31.09124			
8000 * 6000 * 5000	16	128.146452			

time vs np