1 OMP for a matrix with 4 on the main diagonal and 1 on the side

Matrix size \num threads	1	2	3	4	5	6
1000	2	1(2x)	1(2x)	1(2x)	1(2x)	1(2x)
5000	125	77(1.62x)	63(1.98x)	55(2.27x)	49(2.55x)	46(2.72x)
10000	530	318(1.67x)	258(2.05x)	221(2.4x)	196(2.7x)	183(2.9x)
40000	5900	3800(1.55x)	2700(2.17x)	2000(2.95x)	1800(3.27x)	1550(3.81x)

2 OMP for a matrix with 3 on the main diagonal and 1 on the side

Matrix size \num threads	1	2	3	4	5	6
1000	3	2(1.5x)	2(1.5x)	1(3x)	1(3x)	1(3x)
5000	168	101(1.66x)	85(1.98x)	74(2.27x)	66(2.55x)	62(2.71x)
10000	718	420(1.71x)	340(2.11x)	300(2.4x)	260(2.76x)	245(2.93x)
40000	7000	4700(1.49x)	3350(2.09x)	2600(2.69x)	2200(3.18x)	1950(3.59x)

3 std::threads for a matrix with 4 on the main diagonal and 1 on the side

Matrix size \num threads	1	2	3	4	5	6
1000	3	2(1.5x)	2(1.5x)	2(1.5x)	2(1.5x)	2(1.5x)
5000	138	81(1.7x)	69(2x)	60(2.3x)	54(2.55x)	52(2.65x)
10000	504	304(1.66x)	256(1.97x)	225(2.24x)	200(2.52x)	185(2.72x)
40000	5400	3600(1.5x)	2600(2.07x)	2000(2.7x)	1750(3.09x)	1630(3.31x)

4 std::threads for a matrix with 3 on the main diagonal and 1 on the side

Matrix size \num threads	1	2	3	4	5	6
1000	4	3(1.33x)	3(1.33x)	3(1.33x)	3(1.33x)	3(1.33x)
5000	180	110(1.64x)	93(1.94x)	81(2.22x)	74(2.43x)	69(2.61x)
10000	740	440(1.68x)	360(2.06x)	315(2.35x)	285(2.6x)	260(2.85x)
40000	6700	4600(1.46x)	3350(2.x)	2600(2.58x)	2250(3x)	1950(3.44x)