## Practica 5

## Paweł Jędrzejczyk

## Wojciech Pacześniak

Eje 3

Num of processors	2	8
n		
10 <sup>3</sup>	0.000378	0.019386
107	0.197221	1.719871

Eje 4

Num of processors	2	8
n		
10 <sup>3</sup>	0.000525	0.004336
107	0.604119	1.124867

Point-to-point communication is faster when using 2 processors, but when using 8 processors, broadcasting is faster. That means broadcasting is more efficient when using many processors. In scenarios with a small number of processors, the simplicity and directness of point-to-point communication can result in faster communication, while broadcasting becomes more advantageous as the number of processors increases

Eje 5

point-to-point communication			
Num of processors	2	8	
10 <sup>3</sup>	0.000906	0.006112	
107	0.678176	1.279257	

MPI reduction function				
Num of processors	2	8		
n				
10³	0.000550	0.004842		
107	0.000256	0.031345		

Using MPI communication is faster than point-to-point communication, especially for larger amounts of data.