Task 1:

```
KTOP-OJMIJJB:<u>/mnt/c/Users/micha/Documents/DSU_FILES/CSC_410_PARRALELL_COMPUTING/A5</u>$ mpicc_matrixMul.c
mike@DESKTOP-OJMI3JB:/mnt/c/Users/micha/Documents/DSU FILES/CSC 410 PARRALELL COMPUTING/A5$ mpirun -np 2 ./a.out
Matrices allocated successfully.
Matrices initialized successfully.
Process 1 Matrix multiplication complete!
Matrices allocated successfully.
Matrices initialized successfully.
Process 0 Matrix multiplication complete!
Resulting Matrix C:
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
10 10 10 10 10 10 10 10 10 10
TIME IS: 0.245821 seconds
TIME IS: 0.238546 seconds
mike@DESKTOP-OJMI3JB:/mnt/c/Users/micha/Documents/DSU FILES/CSC 410 PARRALELL COMPUTING/A5$
```

Matrix math is good on a 10x10

Matrix multiplication				
	1 Process	2 Process	4 Process	6 Process
Time	10.46	7.47	4.86	3.7

Task 2:

Didn't have time to complete this task but put code so far on github

Task 3:

```
mike@DESKTOP-0JMI3JB:/mnt/c/Users/micha/Documents/DSU FILES/CSC 410 PARRALELL COMPUTING/A5$ mpirun -np 2 ./a.out
Rank 1 sum 1.287002
Rank 0 sum 1.854590
Estimated value of π: 3.141593
Total execution time: 2.678955 seconds
```

It's working as expected

Integrate				
	1 Process	2 Process	4 Process	6 Process
Time	4.65	2.67	1.38	1.04