Trapezoid Rule Integration using MPI

MPI is implemented to integrate the function outlined by the question using a cluster. The subintervals of the integration are equal to the number of processors one designates for the computation. When the trapezoid program is used to integrate the function over 10 processors it computes the following results:

```
-bash-4.2$ mpirun -np 10 Trapezoid_Rule_MPI
 Area found in processor 7 = 77.2812
 Area found in processor 3 = 43.2913
 Area found in processor 9 = 31.2763
 Area found in processor 2 = 26.0438
 Area found in processor 5 = 73.2862
 Area found in processor 1 = 11.2963
 Area found in processor 8 = 62.0288
 Area found in processor 6 = 80.0338
 Area found in processor 4 = 60.0387
 Area found in processor 0 = 2.04875

 Trapezoidal Rule Total Area = 466.625
```

The function is split into segments and then sent numerically to each processor. The cluster does not necessarily finish the computations in numerical order.