

```

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -5.000000e-01 0 5.000000e-01 -5.000000e-01 0
5.000000e-01 1 -8.367912e-03 9.908839e-03 9.908839e-03 -8.367912e-03
-7.475980e-03 -4.642477e-02 -4.642477e-02 -7.475980e-03 4.409814e-02
2.844828e-01
2.844828e-01 4.409814e-02 4.409814e-02 3.285809e-01 6.130637e-01
6.571618e-01
The exact area of our function is = 5.493603e-01.
The uncompensated trapezoid sum is = 6.571618e-01.
The compensated trapezoid sum is = 6.602437e-01.
The compensation error is = 3.081854e-03.
The sum of the subErrors = 3.081854e-03.
The sum of true SubErrors = -1.078015e-01.

```

```

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -6.666667e-01 -3.333333e-01 0 3.333333e-01 6.666667e-01
-6.666667e-01 -3.333333e-01 0 3.333333e-01 6.666667e-01 1
-1.419344e-03 -8.708949e-03 1.081315e-02 1.081315e-02 -8.708949e-03
-1.419344e-03
-1.359477e-03 -8.086574e-03 -4.708948e-03 -4.708948e-03 -8.086574e-03
-1.359477e-03
2.017172e-02 5.787911e-02 2.107843e-01 2.107843e-01 5.787911e-02
2.017172e-02
2.017172e-02 7.805084e-02 2.888352e-01 4.996195e-01 5.574986e-01
5.776703e-01
The exact area of our function is = 5.493603e-01.
The uncompensated trapezoid sum is = 5.776703e-01.
The compensated trapezoid sum is = 5.790400e-01.
The compensation error is = 1.369713e-03.
The sum of the subErrors = 1.369713e-03.
The sum of true SubErrors = -2.831000e-02.

```

```

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -7.777778e-01 -5.555556e-01 -3.333333e-01 -1.111111e-01
1.111111e-01
3.333333e-01 5.555556e-01 7.777778e-01 -7.777778e-01 -5.555556e-01
-3.333333e-01
-1.111111e-01 1.111111e-01 3.333333e-01 5.555556e-01 7.777778e-01 1
-3.112255e-04 -8.891006e-04 -3.301137e-03 -8.544103e-03 2.669989e-02
-8.544103e-03
-3.301137e-03 -8.891006e-04 -3.112255e-04 -3.058929e-04 -8.660246e-04
-3.186856e-03
-9.661761e-03 3.302808e-02 -9.661761e-03 -3.186856e-03 -8.660246e-04
-3.058929e-04
1.116478e-02 1.963915e-02 4.215964e-02 1.143174e-01 1.698113e-01
1.143174e-01

```

4.215964e-02 1.963915e-02 1.116478e-02 1.116478e-02 3.080392e-02
7.296356e-02
1.872810e-01 3.570923e-01 4.714097e-01 5.135694e-01 5.332085e-01
5.443733e-01

The exact area of our function is = 5.493603e-01.

The uncompensated trapezoid sum is = 5.443733e-01.

The compensated trapezoid sum is = 5.449821e-01.

The compensation error is = 6.087613e-04.

The sum of the subErrors = 6.087613e-04.

The sum of true SubErrors = 4.987012e-03.

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -8.181818e-01 -6.363636e-01 -4.545455e-01 -2.727273e-01
-9.090909e-02
9.090909e-02 2.727273e-01 4.545455e-01 6.363636e-01 8.181818e-01
-8.181818e-01
-6.363636e-01 -4.545455e-01 -2.727273e-01 -9.090909e-02 9.090909e-02
2.727273e-01
4.545455e-01 6.363636e-01 8.181818e-01 1 -1.545227e-04 -3.500708e-04
-9.388000e-04 -2.947054e-03 -4.006532e-03 1.720148e-02 -4.006532e-03
-2.947054e-03
-9.388000e-04 -3.500708e-04 -1.545227e-04 -1.528092e-04 -3.446232e-04
-9.184726e-04
-2.888824e-03 -4.850374e-03 1.996607e-02 -4.850374e-03 -2.888824e-03
-9.184726e-04
-3.446232e-04 -1.528092e-04 8.622319e-03 1.329818e-02 2.291767e-02
4.653722e-02
1.071344e-01 1.506849e-01 1.071344e-01 4.653722e-02 2.291767e-02
1.329818e-02
8.622319e-03 8.622319e-03 2.192050e-02 4.483817e-02 9.137538e-02
1.985098e-01
3.491947e-01 4.563291e-01 5.028663e-01 5.257839e-01 5.390821e-01
5.477044e-01

The exact area of our function is = 5.493603e-01.

The uncompensated trapezoid sum is = 5.477044e-01.

The compensated trapezoid sum is = 5.481120e-01.

The compensation error is = 4.075179e-04.

The sum of the subErrors = 4.075179e-04.

The sum of true SubErrors = 1.655861e-03.

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -8.571429e-01 -7.142857e-01 -5.714286e-01 -4.285714e-01
-2.857143e-01
-1.428571e-01 0 1.428571e-01 2.857143e-01 4.285714e-01 5.714286e-01
7.142857e-01 8.571429e-01 -8.571429e-01 -7.142857e-01 -5.714286e-01
-4.285714e-01
-2.857143e-01 -1.428571e-01 0 1.428571e-01 2.857143e-01 4.285714e-01
5.714286e-01 7.142857e-01 8.571429e-01 1 -6.852472e-05 -1.267090e-04

```

-2.576772e-04 -5.867848e-04 -1.462024e-03 -2.698763e-03 5.326272e-03
5.326272e-03
-2.698763e-03 -1.462024e-03 -5.867848e-04 -2.576772e-04 -1.267090e-04
-6.852472e-05
-6.807079e-05 -1.256171e-04 -2.547553e-04 -5.783548e-04 -1.443895e-03
-2.823055e-03
5.324028e-03 5.324028e-03 -2.823055e-03 -1.443895e-03 -5.783548e-04
-2.547553e-04
-1.256171e-04 -6.807079e-05 6.435345e-03 8.880971e-03 1.298798e-02
2.056882e-02
3.626366e-02 7.078723e-02 1.187259e-01 1.187259e-01 7.078723e-02
3.626366e-02
2.056882e-02 1.298798e-02 8.880971e-03 6.435345e-03 6.435345e-03
1.531632e-02
2.830430e-02 4.887312e-02 8.513677e-02 1.559240e-01 2.746499e-01
3.933757e-01
4.641630e-01 5.004266e-01 5.209954e-01 5.339834e-01 5.428644e-01
5.492997e-01

```

The exact area of our function is = 5.493603e-01.

The uncompensated trapezoid sum is = 5.492997e-01.

The compensated trapezoid sum is = 5.495513e-01.

The compensation error is = 2.515799e-04.

The sum of the subErrors = 2.515799e-04.

The sum of true SubErrors = 6.056202e-05.

```

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -8.750000e-01 -7.500000e-01 -6.250000e-01 -5.000000e-01
-3.750000e-01
-2.500000e-01 -1.250000e-01 0 1.250000e-01 2.500000e-01 3.750000e-01
5.000000e-01 6.250000e-01 7.500000e-01 8.750000e-01 -8.750000e-01
-7.500000e-01
-6.250000e-01 -5.000000e-01 -3.750000e-01 -2.500000e-01 -1.250000e-01
0
1.250000e-01 2.500000e-01 3.750000e-01 5.000000e-01 6.250000e-01
7.500000e-01
8.750000e-01 1 -4.412564e-05 -7.478311e-05 -1.358667e-04 -2.682190e-04
-5.780013e-04 -1.281380e-03 -1.729540e-03 4.208223e-03 4.208223e-03
-1.729540e-03
-1.281380e-03 -5.780013e-04 -2.682190e-04 -1.358667e-04 -7.478311e-05
-4.412564e-05
-4.390520e-05 -7.431369e-05 -1.347823e-04 -2.655184e-04 -5.713303e-04
-1.274351e-03
-1.842850e-03 4.276043e-03 4.276043e-03 -1.842850e-03 -1.274351e-03
-5.713303e-04
-2.655184e-04 -1.347823e-04 -7.431369e-05 -4.390520e-05 5.507027e-03
7.252558e-03
9.954893e-03 1.442620e-02 2.246152e-02 3.823107e-02 6.933406e-02
1.074438e-01
1.074438e-01 6.933406e-02 3.823107e-02 2.246152e-02 1.442620e-02

```

```

9.954893e-03
7.252558e-03 5.507027e-03 5.507027e-03 1.275959e-02 2.271448e-02
3.714068e-02
5.960220e-02 9.783328e-02 1.671673e-01 2.746112e-01 3.820550e-01
4.513890e-01
4.896201e-01 5.120816e-01 5.265078e-01 5.364627e-01 5.437153e-01
5.492223e-01
The exact area of our function is = 5.493603e-01.
The uncompensated trapezoid sum is = 5.492223e-01.
The compensated trapezoid sum is = 5.494149e-01.
The compensation error is = 1.926159e-04.
The sum of the subErrors = 1.926159e-04.
The sum of true SubErrors = 1.379832e-04.

```

```

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -8.947368e-01 -7.894737e-01 -6.842105e-01 -5.789474e-01
-4.736842e-01
-3.684211e-01 -2.631579e-01 -1.578947e-01 -5.263158e-02 5.263158e-02
1.578947e-01
2.631579e-01 3.684211e-01 4.736842e-01 5.789474e-01 6.842105e-01
7.894737e-01
8.947368e-01 -8.947368e-01 -7.894737e-01 -6.842105e-01 -5.789474e-01
-4.736842e-01
-3.684211e-01 -2.631579e-01 -1.578947e-01 -5.263158e-02 5.263158e-02
1.578947e-01
2.631579e-01 3.684211e-01 4.736842e-01 5.789474e-01 6.842105e-01
7.894737e-01
8.947368e-01 1 -2.525015e-05 -3.901627e-05 -6.317676e-05 -1.080842e-04
-1.967918e-04 -3.806245e-04 -7.473757e-04 -1.137870e-03 6.411486e-04
4.250673e-03
6.411486e-04 -1.137870e-03 -7.473757e-04 -3.806245e-04 -1.967918e-04
-1.080842e-04
-6.317676e-05 -3.901627e-05 -2.525015e-05 -2.516218e-05 -3.885183e-05
-6.285138e-05
-1.074019e-04 -1.952985e-04 -3.774972e-04 -7.440537e-04 -1.165693e-03
5.471347e-04
4.483890e-03 5.471347e-04 -1.165693e-03 -7.440537e-04 -3.774972e-04
-1.952985e-04
-1.074019e-04 -6.285138e-05 -3.885183e-05 -2.516218e-05 4.528905e-03
5.678687e-03
7.317117e-03 9.754385e-03 1.357446e-02 1.994294e-02 3.124960e-02
5.169299e-02
8.164601e-02 9.844560e-02 8.164601e-02 5.169299e-02 3.124960e-02
1.994294e-02
1.357446e-02 9.754385e-03 7.317117e-03 5.678687e-03 4.528905e-03
4.528905e-03
1.020759e-02 1.752471e-02 2.727909e-02 4.085355e-02 6.079649e-02
9.204609e-02
1.437391e-01 2.253851e-01 3.238307e-01 4.054767e-01 4.571697e-01

```

4.884193e-01
5.083622e-01 5.219367e-01 5.316911e-01 5.390082e-01 5.446869e-01
5.492158e-01
The exact area of our function is = 5.493603e-01.
The uncompensated trapezoid sum is = 5.492158e-01.
The compensated trapezoid sum is = 5.493524e-01.
The compensation error is = 1.365919e-04.
The sum of the subErrors = 1.365919e-04.
The sum of true SubErrors = 1.445394e-04.

xi	xf	subErrors	subTrueErr	subAreas	ACC_Area
-1	-9.047619e-01	-8.095238e-01	-7.142857e-01	-6.190476e-01	-5.238095e-01
-4.285714e-01	-3.333333e-01	-2.380952e-01	-1.428571e-01	-4.761905e-02	4.761905e-02
1.428571e-01	2.380952e-01	3.333333e-01	4.285714e-01	5.238095e-01	6.190476e-01
7.142857e-01	8.095238e-01	9.047619e-01	-9.047619e-01	-8.095238e-01	-7.142857e-01
-6.190476e-01	-5.238095e-01	-4.285714e-01	-3.333333e-01	-2.380952e-01	-1.428571e-01
-4.761905e-02	4.761905e-02	1.428571e-01	2.380952e-01	3.333333e-01	4.285714e-01
5.238095e-01	6.190476e-01	7.142857e-01	8.095238e-01	9.047619e-01	1
-1.830783e-05	-2.703186e-05	-4.143083e-05	-6.631111e-05	-1.114937e-04	-1.975116e-04
-3.647124e-04	-6.573043e-04	-8.272217e-04	7.554875e-04	3.223489e-03	7.554875e-04
-8.272217e-04	-6.573043e-04	-3.647124e-04	-1.975116e-04	-1.114937e-04	-6.631111e-05
-4.143083e-05	-2.703186e-05	-1.830783e-05	-1.825606e-05	-2.694113e-05	-4.126434e-05
-6.599051e-05	-1.108495e-04	-1.962034e-04	-3.623890e-04	-6.567895e-04	-8.539407e-04
7.053518e-04	3.368517e-03	7.053518e-04	-8.539407e-04	-6.567895e-04	-3.623890e-04
-1.962034e-04	-1.108495e-04	-6.599051e-05	-4.126434e-05	-2.694113e-05	-1.825606e-05
4.049968e-03	4.957835e-03	6.201288e-03	7.962562e-03	1.055950e-02	1.457467e-02
2.112086e-02	3.230485e-02	5.123134e-02	7.659591e-02	9.012876e-02	7.659591e-02
5.123134e-02	3.230485e-02	2.112086e-02	1.457467e-02	1.055950e-02	7.962562e-03
6.201288e-03	4.957835e-03	4.049968e-03	4.049968e-03	9.007803e-03	1.520909e-02
2.317165e-02	3.373115e-02	4.830583e-02	6.942668e-02	1.017315e-01	1.529629e-01
2.295588e-01	3.196875e-01	3.962835e-01	4.475148e-01	4.798197e-01	

5.009405e-01
 5.155152e-01 5.260747e-01 5.340372e-01 5.402385e-01 5.451964e-01
 5.492463e-01
 The exact area of our function is = 5.493603e-01.
 The uncompensated trapezoid sum is = 5.492463e-01.
 The compensated trapezoid sum is = 5.493581e-01.
 The compensation error is = 1.118133e-04.
 The sum of the subErrors = 1.118133e-04.
 The sum of true SubErrors = 1.139721e-04.

xi	xf	subErrors	subTrueErr	subAreas	ACC_Area
-1	-9.333333e-01	-8.666667e-01	-8.000000e-01	-7.333333e-01	-6.666667e-01
-6.000000e-01	-5.333333e-01	-4.666667e-01	-4.000000e-01	-3.333333e-01	-2.666667e-01
-2.000000e-01	-1.333333e-01	-6.666667e-02	0	6.666667e-02	1.333333e-01
2.000000e-01	2.666667e-01	3.333333e-01	4.000000e-01	4.666667e-01	5.333333e-01
6.000000e-01	6.666667e-01	7.333333e-01	8.000000e-01	8.666667e-01	9.333333e-01
-9.333333e-01	-8.666667e-01	-8.000000e-01	-7.333333e-01	-6.666667e-01	-6.000000e-01
-5.333333e-01	-4.666667e-01	-4.000000e-01	-3.333333e-01	-2.666667e-01	-2.000000e-01
-1.333333e-01	-6.666667e-02	0	6.666667e-02	1.333333e-01	2.000000e-01
2.666667e-01	3.333333e-01	4.000000e-01	4.666667e-01	5.333333e-01	6.000000e-01
6.666667e-01	7.333333e-01	8.000000e-01	8.666667e-01	9.333333e-01	1
-5.919246e-06	-7.716669e-06	-1.023216e-05	-1.382642e-05	-1.907924e-05	-2.694311e-05
-3.901086e-05	-5.796364e-05	-8.821068e-05	-1.362297e-04	-2.074740e-04	-2.859259e-04
-2.575060e-04	1.834320e-04	1.000000e-03	1.000000e-03	1.834320e-04	-2.575060e-04
-2.859259e-04	-2.074740e-04	-1.362297e-04	-8.821068e-05	-5.796364e-05	-3.901086e-05
-2.694311e-05	-1.907924e-05	-1.382642e-05	-1.023216e-05	-7.716669e-06	-5.919246e-06
-5.911242e-06	-7.704926e-06	-1.021456e-05	-1.379942e-05	-1.903682e-05	-2.687493e-05
-3.889920e-05	-5.777963e-05	-8.791592e-05	-1.358178e-04	-2.072077e-04	-2.872557e-04
-2.644778e-04	1.734868e-04	1.016778e-03	1.016778e-03	1.734868e-04	-2.644778e-04
-2.872557e-04	-2.072077e-04	-1.358178e-04	-8.791592e-05	-5.777963e-05	-3.889920e-05
-2.687493e-05	-1.903682e-05	-1.379942e-05	-1.021456e-05	-7.704926e-06	-5.911242e-06
2.745466e-03	3.148808e-03	3.646178e-03	4.268477e-03	5.059986e-03	

```

6.085627e-03
7.442922e-03 9.282003e-03 1.183908e-02 1.549020e-02 2.082353e-02
2.866667e-02
3.974359e-02 5.307692e-02 6.333333e-02 6.333333e-02 5.307692e-02
3.974359e-02
2.866667e-02 2.082353e-02 1.549020e-02 1.183908e-02 9.282003e-03
7.442922e-03
6.085627e-03 5.059986e-03 4.268477e-03 3.646178e-03 3.148808e-03
2.745466e-03
2.745466e-03 5.894274e-03 9.540451e-03 1.380893e-02 1.886891e-02
2.495454e-02
3.239746e-02 4.167947e-02 5.351855e-02 6.900874e-02 8.983227e-02
1.184989e-01
1.582425e-01 2.113195e-01 2.746528e-01 3.379861e-01 3.910630e-01
4.308066e-01
4.594733e-01 4.802968e-01 4.957870e-01 5.076261e-01 5.169081e-01
5.243510e-01
5.304367e-01 5.354966e-01 5.397651e-01 5.434113e-01 5.465601e-01
5.493056e-01

```

The exact area of our function is = 5.493603e-01.

The uncompensated trapezoid sum is = 5.493056e-01.

The compensated trapezoid sum is = 5.493604e-01.

The compensation error is = 5.478852e-05.

The sum of the subErrors = 5.478852e-05.

The sum of true SubErrors = 5.473722e-05.

```

xi xf subErrors subTrueErr subAreas ACC_Area
-1 -9.500000e-01 -9.000000e-01 -8.500000e-01 -8.000000e-01
-7.500000e-01
-7.000000e-01 -6.500000e-01 -6.000000e-01 -5.500000e-01 -5.000000e-01
-4.500000e-01
-4.000000e-01 -3.500000e-01 -3.000000e-01 -2.500000e-01 -2.000000e-01
-1.500000e-01
-1.000000e-01 -5.000000e-02 0 5.000000e-02 1.000000e-01 1.500000e-01
2.000000e-01 2.500000e-01 3.000000e-01 3.500000e-01 4.000000e-01
4.500000e-01
5.000000e-01 5.500000e-01 6.000000e-01 6.500000e-01 7.000000e-01
7.500000e-01
8.000000e-01 8.500000e-01 9.000000e-01 9.500000e-01 -9.500000e-01
-9.000000e-01
-8.500000e-01 -8.000000e-01 -7.500000e-01 -7.000000e-01 -6.500000e-01
-6.000000e-01
-5.500000e-01 -5.000000e-01 -4.500000e-01 -4.000000e-01 -3.500000e-01
-3.000000e-01
-2.500000e-01 -2.000000e-01 -1.500000e-01 -1.000000e-01 -5.000000e-02
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3.000000e-01
3.500000e-01 4.000000e-01 4.500000e-01 5.000000e-01 5.500000e-01

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6.000000e-01
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9.000000e-01
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-5.599605e-06 -7.098498e-06 -9.112073e-06 -1.185476e-05 -1.564304e-05
-2.094535e-05
-2.844908e-05 -3.912920e-05 -5.424063e-05 -7.495069e-05 -1.007313e-04
-1.242440e-04
-1.191667e-04 -2.666667e-05 2.053057e-04 4.613610e-04 4.613610e-04
2.053057e-04
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-3.912920e-05 -2.844908e-05 -2.094535e-05 -1.564304e-05 -1.185476e-05
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-2.413102e-06 -2.934658e-06 -3.601734e-06 -4.464459e-06 -5.593549e-06
-7.090039e-06
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-3.905546e-05
-5.414510e-05 -7.485599e-05 -1.007375e-04 -1.246533e-04 -1.205891e-04
-2.930004e-05
2.043774e-04 4.663209e-04 4.663209e-04 2.043774e-04 -2.930004e-05
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-5.593549e-06
-4.464459e-06 -3.601734e-06 -2.934658e-06 -2.413102e-06 2.022546e-03
2.237479e-03
2.487946e-03 2.782064e-03 3.130339e-03 3.546543e-03 4.048955e-03
4.662162e-03
5.419708e-03 6.367984e-03 7.571987e-03 9.123711e-03 1.115385e-02
1.384615e-02
1.744841e-02 2.225610e-02 2.850000e-02 3.600000e-02 4.352941e-02
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4.852941e-02 4.352941e-02 3.600000e-02 2.850000e-02 2.225610e-02
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9.530035e-03
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3.670573e-02
4.427771e-02 5.340142e-02 6.455527e-02 7.840142e-02 9.584983e-02
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3.667236e-01

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4.959281e-01
5.050518e-01 5.126238e-01 5.189918e-01 5.244115e-01 5.290736e-01
5.331226e-01
5.366691e-01 5.397995e-01 5.425815e-01 5.450695e-01 5.473070e-01
5.493295e-01

The exact area of our function is = 5.493603e-01.

The uncompensated trapezoid sum is = 5.493295e-01.

The compensated trapezoid sum is = 5.493603e-01.

The compensation error is = 3.081854e-05.

The sum of the subErrors = 3.081854e-05.

The sum of true SubErrors = 3.080487e-05.