```
ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 4.724372e-01 using 1 samples.
 The uncompensated trapezoid sum is = 7.692308e-02.
 The compensated trapezoid sum is = 1.262327e-01.
 The compensation error is = 4.930966e-02.
 The sum of the subErrors = 4.930966e-02.
 The sum of true SubErrors = 4.724372e-01.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 1.655861e-03 using 11 samples.
 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.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 1.139721e-04 using 21 samples.
 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.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 5.127733e-05 using 31 samples.
 The uncompensated trapezoid sum is = 5.493090e-01.
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 5.131079e-05.
 The sum of the subErrors = 5.131079e-05.
 The sum of true SubErrors = 5.127733e-05.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 2.932117e-05 using 41 samples.
 The uncompensated trapezoid sum is = 5.493310e-01.
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 2.933353e-05.
```

```
 The sum of the subErrors = 2.933353e-05.
 The sum of true SubErrors = 2.932117e-05.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 1.895279e-05 using 51 samples.
 The uncompensated trapezoid sum is = 5.493414e-01.
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 1.895796e-05.
 The sum of the subErrors = 1.895796e-05.
 The sum of true SubErrors = 1.895279e-05.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 1.324920e-05 using 61 samples.
 The uncompensated trapezoid sum is = 5.493471e-01.
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 1.325172e-05.
 The sum of the subErrors = 1.325172e-05.
 The sum of true SubErrors = 1.324920e-05.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 9.780346e-06 using 71 samples.
 The uncompensated trapezoid sum is = 5.493505e-01.
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 9.781723e-06.
 The sum of the subErrors = 9.781723e-06.
 The sum of true SubErrors = 9.780346e-06.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 7.514758e-06 using 81 samples.
 The uncompensated trapezoid sum is = 5.493528e-01.
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 7.515572e-06.
 The sum of the subErrors = 7.515572e-06.
 The sum of true SubErrors = 7.514758e-06.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 5.954044e-06 using 91 samples.
 The uncompensated trapezoid sum is = 5.493544e-01.
```

```
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 5.954554e-06.
 The sum of the subErrors = 5.954554e-06.
 The sum of true SubErrors = 5.954044e-06.

ans =

   281

The exact area of our function is = 5.493603e-01.
 The difference of exact and approx = 4.833471e-06 using 101 samples.
 The uncompensated trapezoid sum is = 5.493555e-01.
 The compensated trapezoid sum is = 5.493603e-01.
 The compensation error is = 4.833807e-06.
 The sum of the subErrors = 4.833807e-06.
 The sum of true SubErrors = 4.833471e-06.
>>
```