

- 1) (2 pts each) Use the technique in Section 5 of the Integration notes to use MATLAB's `integral` function to compute the same three integrals from Problem 1 of Homework 18. You should compute the relative error in each case.
- 2) (4 pts) Load data from the `hw19.dat` file into MATLAB using the syntax

```
load hw19.dat
x = hw19(:,1);
y = hw19(:,2);
```

Use the trapezoidal rule to determine the value of the integral of this tabulated function (note that you don't have a relative error here because you don't know the exact value). You can obtain the values of a , b and n from the x vector. Your approach should work for any data file, meaning that you should obtain a , b and n using MATLAB commands applied to the x vector. Don't look at the x and manually assign values of a , b and n .