

Homework

1. Write an m-file `my_comp_midpt` that will use the Midpoint method to approximate the integral $\int_a^b f(x)dx$ using n subintervals. Your function should be called using

```
>> value = my_comp_midpt(funname, a, b, n)
```

2. Write an m-file for the function $y = e^{-x^2}$.
3. Use `my_comp_midpt` to approximate the integral

$$\int_{-2}^2 e^{-x^2} dx$$

using $n = 5, 10, 15, 20$ and 25 . What is the error in each case (use the symbolic toolbox to check your errors)?

4. Do #1b pg 327 in book.
5. Do #6 pg 339 in book.