MTH 352/652: Homework #6

Due Date: March 08, 2024

1 Problems for Everyone

1. Show that

$$f''(x) = \frac{f(x + \Delta x) - 2f(x) + f(x - \Delta x)}{(\Delta x)^2} + O\left((\Delta x)^2\right).$$

2. pg. 185, #5.1.4, #5.1.6 (a-b), #5.1.7 (a-b), #5.18