

MATH 4513 : HOMEWORK 3

1. Show that

$$e_{n+1} \approx \frac{|f''(r)|}{2|f'(r)|} e_n e_{n-1} = C e_n e_{n-1}$$

2. Use the secant method to find a solution of

$$\exp(x^2 - 2) = 3\ln(x)$$

starting with $x_0 = 1.5, x_1 = 1.4$.