

**MATH 413**  
**Fall 2007**  
**Lab5**

**Exercise Set 2.4**

**Exercise 1**

**(3 pt)**

Given the function  $f(x) = 3x^2 + 4x - 7$ .

Plot the function using maple.

Find the root of this function in the interval  $[-3, 2]$  within  $10^{-3}$  using the CD and the Newton's method with starting value  $x = -3$  and starting value  $x = 2$ .

**Exercise 2**

**(4 pt)**

Like Exercise 1, only with the function  $f(x) = 3x^3 + x^2 - 11x + 7$ .

**Exercise 3**

**(3 pt)**

Like Exercise 1, only with the function  $f(x) = 3x^4 - 2x^3 - 12x^2 + 18x - 7$ .