

## Root Finding: Newton-Raphson Method 1

Determine the largest real root of the equation  $f(x) = x^3 - 6x^2 + 11x - 6.1$ :

- a) Graphically
- b) Using 3 iterations of the Newton-Raphson Method with initial guess  $x_0 = 3.5$ . Fill out the following table:

Iteration	$x_{i+1}$	$ e_a $ (%)
1		
2		
3		

Recall that  $|e_a| = 100\% * \left| \frac{\text{present} - \text{previous}}{\text{present}} \right|$ .