

No.1 Use Newton's method to solve the system of equations

Number of iterations taken = 26

x = 3×1
1.0000
1.0000
1.0000

No.3

Number of iterations taken = 14

Resulting parameter estimates are [2.5411 0.2595]

chi-square obs = 2.8813e-07

pvalue = 1

Since the value of the p-value is 1, then we reject the null hypothesis, since the fit of the model predictions to the data is almost exact, which is not realistic hence, the parameter estimates are not good.