



Lab #5

Instructor: Dr. Ha Viet Uyen Synh.

1. Write a program to fit a cubic equation to the following data:

x	3	4	5	7	8	9	11	12
y	1.6	3.6	4.4	3.4	2.2	2.8	3.8	4.6

Along with the coefficients, determine r^2 and sy/x .

2. Fit the following function:

$$y = \alpha_4 x(1 - e^{\beta_4 x})$$

Use nonlinear regression to estimate α_4 and β_4 based on the following data.

x	0.1	0.2	0.4	0.6	0.9	1.3	1.5	1.7	1.8
y	0.75	1.25	1.45	1.25	0.85	0.55	0.35	0.28	0.18