

Lab Assignment 5

1. Given the following data:

x	1.6	2	2.5	3.2	4	4.5
f(x)	2	8	14	15	8	2

Use the least-squares regression to fit the data to

(a) a straight line (b) a parabolic curve (c) an exponential function

Here, also plot the functions together with the data on the same graph and compare the squared errors.

2. Repeat prob. 1 for the following world population data:

Year	1965	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015
Population [billions]	3.34	3.7	4.08	4.46	4.87	5.33	5.75	6.15	6.54	6.96	7.38