Homework 5

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April 1, 2017

1   PROBLEM 2

a) What are the best-fit values of the parameters?

Linear Fit
Slope : 4.14 ± 0.24 Intercept : 17.8 ± 0.05
Quadratic Fit
For $y = ax^2 + bx + c$ a : -1.95 ± 0.24 b : 6.13 ± 0.33 c : 17.7 ± 0.05
Broken Line Fit
Slope 1 : 5.11 ± 0.28 Intercept 1 : 17.7 ± 0.06 Slope 2 : 0.835 ± 0.231 Intercept 2 : 18.3 ± 0.58

b) Which function fits the data best?
The quadratic function passes through more points than any other, so fits the data best.