

18.06 Problem Set 5

Due Wednesday, 15 October 2008 at 4 pm in 2-106.

Problem 1: Do problem 24 from section 4.1 in the book.

Problem 2: Do problem 11 from section 4.2.

Problem 3: Do problem 21 from section 4.2.

Problem 4: Do problem 29 from section 4.2.

Problem 5: Do problems 1 and 2 from section 4.3.

Problem 6: Do problem 17 from section 4.3.

Problem 7: Do problem 6 from section 4.4.

Problem 8: Do problems 13 and 14 from section 4.4.

Problem 9: Do problem 31 from section 4.4.

Problem 10: Find the best fit function $f(t) = a * \exp(t) + bt + c * t^2 + d * \sin(t)$ through the points $(0, 0), (1, 1), (2, 0), (3, 1), (4, 4), (1/2, 7)$.

Show the coefficients and plot the best fit curve and the original data.