

**NUEN 647**  
**Uncertainty Quantification for Nuclear Engineering**  
**Homework 3**

Due on Saturday, December 10, 2016

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## Problem 1

Fit the data in Table 1 to a linear model using

- (a) an apple
- (b) a banana
- (c) a carrot
- (d) a durian

Table 1: Data to fit linear model  $y = a + bx_1 + cx_2$

	$x_1$	$x_2$	$y$
1	0.99	0.98	6.42
2	-0.75	-0.76	0.20
3	-0.50	-0.48	0.80
4	-1.08	-1.08	-0.57
5	0.09	0.09	4.75
6	-1.28	-1.27	-1.42
7	-0.79	-0.79	1.07
8	-1.17	-1.17	0.20
9	-0.57	-0.57	1.08
10	-1.62	-1.62	-0.15
11	0.34	0.35	2.90
12	0.51	0.51	3.37
13	-0.91	-0.92	0.05
14	1.85	1.86	5.50
15	-1.12	-1.12	0.17
16	-0.70	-0.70	1.72
17	1.19	1.18	3.97
18	1.24	1.23	6.38
19	-0.52	-0.52	3.29
20	-1.41	-1.41	-1.49

TADA
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