

Assignment 10

Due: Nov. 28.

1. Using the following data, fit the best straight line assuming Laplace distribution for the error terms

$x:$	19	8	9	22	25	12	35	14	13	23	35	7	33
$y:$	-36	-12	2	1	39	34	93	19	30	26	125	-4	48
	26	13	9	1	8	9	20	10	26	17	1	35	
	41	50	124	-40	-40	31	41	43	90	25	-25	135	

Compute the standard error of the regression-coefficient estimators, and that of $\hat{\gamma}$.

2. Assuming that the distribution of the ε_i 's is Cauchy, find the best estimates for σ , β_0 and β_1 (with the corresponding standard error), based on the following data:

x	1	2	3	4	5	6	7	8	9	10
y	29	242	77	84	108	96	123	411	128	379
	11	12	13	14	15	16	17	18	19	20
	166	196	196	181	199	252	232	259	259	264