N<p

Algorithm	Test MSE	Parameters Selected	# Correct	# Incorrect	MSE Diff	# Correct Diff	# Incorrect Diff
LASSO	7.22	1, 4, 8	2	1	0.93	0	3
Ridge w/ST	7.08	1, 4, 8, 11	2	2	1.07	0	2
Ridge w/Quad ST	8.8	1, 8	2	0	-0.65	0	4
Ridge w/Exp ST	9.64	8	1	0	-1.49	1	4
Elastic Net	9.5	8	1	0	-1.35	1	4
LASSO w/BGD	10.36	All	4	34	-2.21	-2	-30
sklearn.linear_model	8.15	1, 4, 5, 8, 9, 11	2	4	0	0	0

N=p

Algorithm	Test MSE	Parameters Selected	# Correct	# Incorrect	MSE Diff	# Correct Diff	# Incorrect Diff
LASSO	8.2	8	1	0	-1.27	1	3
Ridge w/ST	7.84	1, 8	2	0	-0.91	0	3
Ridge w/Quad ST	7.85	1, 8	2	0	-0.92	0	3
Ridge w/Exp ST	7.99	1, 8	2	0	-1.06	0	3
Elastic Net	7.48	1, 8	2	0	-0.55	0	3
LASSO w/BGD	7.76	All	4	34	-0.83	-2	-31
sklearn.linear_model	6.93	1, 2, 6, 8, 14	2	3	0	0	0

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Algorithm	Test MSE	Parameters Selected	# Correct	# Incorrect	MSE Diff	# Correct Diff	# Incorrect Diff
LASSO	7.35	1, 7, 8	3	0	0.2	0	3
Ridge w/ST	7.18	1, 7, 8	3	0	0.37	0	3
Ridge w/Quad ST	7.18	1, 7, 8	3	0	0.37	0	3
Ridge w/Exp ST	7.44	1, 7, 8	3	0	0.11	0	3
Elastic Net	7.78	1, 4, 7, 8	3	1	-0.23	0	2
LASSO w/BGD	7.95	All	4	34	-0.4	-1	-31
sklearn.linear_model	7.55	1, 4, 7, 8, 13, 20	3	3	0	0	0