$PS9_Zhang$

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1 Answer for question 7

The dimension of the training data is 404×14 . There are 60 additional X variables introduced by the recipe steps.

2 Answer for question 8

Optimal value of lambda for LASSO model is 0.002592944; for LASSO model, in-sample RMSE equals to 0.1392827; out-of-sample RMSE equals to 0.1820611.

3 Answer for question 9

Optimal value of lambda for ridge regression is 0.09236709 and out-of-sample RMSE for ridge regression is 0.1726775.