Problem 1

LDA Accuracy = 0.97

QDA Accuracy = 0.96

A screenshot of a graph

AI-generated content may be incorrect.

Problem 2

MSE (test) without intercept 106775.36156418786

MSE (test) with intercept 3707.8401812458424

MSE (train) without intercept 19099.44684457091

MSE (train) with intercept 2187.1602949303906

Problem 3

A graph of a function

AI-generated content may be incorrect.

Optimal λ: 0.0600 (Test MSE = 2851.33)

A graph of a weight loss

AI-generated content may be incorrect.

Problem 4

A graph of a function

AI-generated content may be incorrect.

Problem 5

A comparison of a graph

AI-generated content may be incorrect.

Optimal p (λ=0): 1, Test MSE: 3845.03

Optimal p (λ=0.06): 4, Test MSE: 3895.58

A graph of a line

AI-generated content may be incorrect.