

STA 732: Homework 3

Due: Jan 29th, 2026

Problem 1

Solve Exercise 2.2 from the lecture notes (UMVUE for the CDF in the normal mean model).

Problem 2

Solve Exercise 2.3 from the lecture notes (Linear model).

Problem 3

Solve Exercise 2.4 from the lecture notes (Bias-Variance Decomposition).

Problem 4

Solve Exercise 2.7 from the lecture notes (Cramer-Rao Lower Bounds).

Problem 5

Solve Exercise 2.8 from the lecture notes (DQM implications).