

# 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).