

# Talis Biomedical Statistics Course - Homework 6

**Due: 22 January 2020 9:00 AM**

Name: [your first and last name]  
Collaborators: [list all the people you worked with]  
Date: [date of submission]

By turning in this assignment, I agree by the **Stanford honor code** and declare that all of this is my own work.

The exercises can be found in the DeGroot & Schervish's textbook, available [here](#).

## Problem 1

Section 7.5 Exercise 2

## Problem 2

Section 7.5 Exercise 3

## Problem 3

Section 7.5 Exercise 6

## Problem 4

- (a) Section 7.5 Exercise 9
- (b) Suppose that  $X_1, \dots, X_n$  form a random sample from a distribution with the pdf given in Part (a). Find the MLE of  $e^{-1/\theta}$ . *n.b. you'll want to read Section 7.6 before answering this part.*

## Problem 5

Section 7.6 Exercise 3

## Problem 6

Section 7.6 Exercise 4