

**HW 3 – 4803, Spring 2023**  
**Each problem is worth 10 points**

**1 Part I – theoretical problems**

1. Derive equation (5.2) on page 202 of “An Introduction to Statistical Learning”
- 2-4. From the Book “An Introduction to Statistical Learning”– 7.9 Exercises 1,2,5

**2 Part II – programming**

**Programming Problems 1-5** From the Book “An Introduction to Statistical Learning”– 4.8 Exercise 14 parts d, e, and g (you did the other parts in homework 2); 5.4 Exercises 8 and 9; and 7.9 Exercises 6 (skip the bit about ANOVA) and 9 (the “degrees of freedom” refer to the number of knots, which you can just place at equally spaced locations).