

**MA 542 REGRESSION ANALYSIS  
SPRING 2018**

HW-3

Due: M 2/05

1. Chapter 2, page 92, question 2.15 (only b) and d)).
2. Chapter 2, page 92, question 2.16 (only b) and e)).
3. Chapter 2, page 93, question 2.23.
4. Chapter 2, page 93, question 2.25.
5. Chapter 2, page 94, question 2.29.
6. Given a fixed  $\sigma^2 > 0$  and  $X_h$  value in the range of possible  $X$  values, what, if anything, can be done to ensure that  $\sigma^2\{\hat{Y}_h\} \rightarrow 0$  as  $n \rightarrow \infty$ ? And what, if anything, can be done to ensure that  $\sigma^2\{pred\} \rightarrow 0$  as  $n \rightarrow \infty$ ?