1. Using your class notes, prepare a 1-2 paragraph summary of what we talked about in class since the last homework. I do not want just a bulleted list of topics, I want you to use complete sentences and establish context (Why is what we have learned relevant? How does it connect with other things you have learned here or in other classes?). The more insight you give, the better.

2. B&V 5.1. Part d asks a simple question pertaining to sensitivity analysis using the dual, which we did not cover in class. But it is straightforward; you can read about it in Section 5.6.


4. B&V 4.57 and 5.20. The statement of the latter contains the answer for the former, so for 4.57 you just need to clearly explain how that answer comes about.


6. B&V 5.31. This question asks you to show that the KKT conditions imply the simple geometric optimality conditions (page 6 from Notes 9). Of course, the KKT conditions are sufficient for $x^*$ to be a solution, and the geometric condition is necessary and sufficient, so you know it’s true. But you should show how KKT directly leads to the geometric condition.