

00102892: Statistical Learning Homework 1

*Due:* September 23, 2019

1. Prove the no free lunch theorem for any loss function  $\ell(h, f)$ . You may state additional assumptions on  $\ell$  if necessary.
2. ESL Ex. 3.4
3. ESL Ex. 3.11
4. ESL Ex. 3.5
5. ESL Ex. 3.6
6. ESL Ex. 3.12
7. ESL Ex. 3.16
8. ESL Ex. 3.28