

**HOMEWORK 7**  
STA701.01, Statistical Inference  
Fall Semester, 2014

**Due:** Thurs Nov 6th 2014.  
Let  $\mathcal{A}$  be the space of actions.

- 1** Do exercises from 1, 3 to 6 on Section 2.9. Do exercises 1 to 5 on Section 2.10, exercises 1 to 16 on Section 2.11.
- 2** Find an example on Exercise 2 on Section 2.7 which is NOT on the solution set.
- 3** Suppose  $\Theta = \{\theta_1, \dots, \theta_k\}$  is finite. Prove that if  $\delta_0 \in D^*$  is Bayes with respect to a prior  $p = (p_1, \dots, p_k)$  such that  $p_i > 0$  for  $i = 1, \dots, k$ , then  $\delta_0$  is admissible.