## Homework 1: Due 1/30/2018

- 1. (15 points) Problem 1 & 2 (a)-(d) on page 299 of Shao (2003). +(e) Let  $X_1, \dots, X_n \stackrel{\text{iid}}{\sim} E(\theta, 1), \theta \in \mathbb{R}$ , and  $\Pi$  has a Lebesgue p.d.f.  $b^{-1}e^{-a/b}e^{\theta/b}\mathbb{1}(-\infty, a)(\theta), a \in \mathbb{R}, b > 0$ .
- 2. (10 points) Problem 6 on page 299 of Shao (2003).
- 3. (10 points) Problem 15 on page 301 of Shao (2003).
- 4. (15 points) Problem 7 & 11 on page 300 of Shao (2003). (Non-squared-error loss function. Why the loss functions are meaningful here?)