## Problem Set 4

## CPSC 689 Randomized Algorithms Andreas Klappenecker

## The assignment is due next Monday, Oct 3, before class.

Solve the following exercises in our textbook:

- 1. Exercise 3.16
- 2. Exercise 3.20
- 3. Exercise 3.25
- 4. Exercise 4.9 [Hint: For (c), note that if the median is within  $\varepsilon E[X]$  of E[X], then less than half of the weak estimates are not within  $\varepsilon E[X]$  of E[X].
- 5. Exercise 4.21

Typeset your solution in LATEX or write very neatly!