About robustness (from page 481 – 482 of [CB])

. . . any statistical procedure should possess the following desirable features:

(1) It should have a reasonably good (optimal or nearly optimal) efficiency at the assumed model.
(2) It should be robust in the sense that small deviations from the model assumptions should impair the performance only slightly. . . .
(3) Somewhat larger deviations from the model should not cause a catastrophe.

Additional exercises

- look at the proof of Thm 10.1.12
- review the content of Apendix 3
- study Example 10.2.1
- study the notion of breakdown value, of Definition 10.2.2
- study Examples 10.2.3 and 10.2.4 on median and mean.