

Excercise section 1: Repetition of basic statistics

MVE220/MSA400

March 25, 2019

Recommended problems are from Introduction to Probability and Statistics: Principles and Applications for Engineering and the Computing Sciences[1].

During the exercise session 01.04.2019 we will consider problems shown in the exercise slides.

Problems that cover specific topics:

- (i) Probability densities (chapter 3.2, 4.1): 3.8, 4.1, 4.9
- (ii) Independent events, conditional probabilities (chapter 2.2, 2.3): 2.15, 2.18
- (iii) Poisson distribution (chapter 3.8): 3.8, 3.61, 3.63
- (iv) Expected value, variance, moments (chapter 3.3): 3.13, 3.21
- (v) Correlation (chapter 5.3): 5.20, 5.27
- (vi) Point estimation (chapter 7.1): 7.5, 7.32
- (vii) Confidence intervals (chapter 7.4): 7.47

References

- [1] Milton J Susan and Jesse C Arnold. *Introduction to Probability and Statistics: Principles and Applications for Engineering and the Computing Sciences*. John Wiley & Sons, 2003.