STATISTICS 2
WS 2023/24 (Mag. Thomas Forstner)

Course-Number: 366.554

4) Create a box-plot and a histogram for the variables X_1 and X_2 from example 2.

5) The value of haemoglobin of a sample of 16 patients with sickle cell anaemia was measured.

haemoglobin [g/100ml]																
Patients	7,2	7,7	8,0	8,1	8,3	8,4	8,4	8,5	8,6	8,7	9,1	9,1	9,1	9,8	10,1	10,3

a) Calculate a point estimator for the true mean and the true standard deviation.
b) Calculate a 95% confidence interval for the true mean value of haemoglobin based on the sample above.
c) What would happen with the confidence interval, if the sample size was not 16 patients but 160 patients?