Kurzlösungen für das Übungsblatt 11

1.1 $E(X) = \frac{1}{\lambda} \quad \rightarrow \quad \hat{\lambda}_1 = \frac{1}{\frac{1}{n}\sum_{i=1}^{n} x_i} = 0,124$

1.2 $V(X) = \frac{1}{\lambda^2} \quad \rightarrow \quad \hat{\lambda}_2 = \frac{1}{\sqrt{\frac{1}{n}\sum_{i=1}^{n} x_i^2 - (\frac{1}{n}\sum_{i=1}^{n} x_i)^2}} = 0,142$

2. $E(X) = n \cdot p \qquad V(X) = n \cdot p \cdot (1-p)$

$\hat{p} = 1 - \frac{s^2}{\frac{1}{n}\sum_{i=1}^{n} x_i} = 0,4346$

$\hat{n} = \frac{\frac{1}{n}\sum_{i=1}^{n} x_i}{\hat{p}} = 22.32$