

$$3.35 \quad P(X=x) = \frac{C_K^x \cdot C_{N-K}^{n-x}}{C_N^n}$$

$$\begin{array}{ll} N: 100 & n=10 \\ K=8 & x=2 \end{array} \Rightarrow P(X=2) = \frac{C_8^2 \cdot C_{92}^8}{C_{100}^{10}} = 0.15$$

$$3.36 \quad \begin{array}{ll} N=20 & n=4 \\ K=15 & x=2 \end{array} \Rightarrow P(X=2) = \frac{C_{15}^2 \cdot C_5^2}{C_{20}^4} = 0.21$$

3.41)

$$a) \quad X \geq 2 \rightarrow P(X \geq 2) = 1 - P(X < 2) \\ = 0.26$$

$$b) \quad X=0 \rightarrow P(X=0) = \frac{e^{-1.25} \cdot 1 \cdot 25^0}{0!} = 0.287$$

$$c) \quad X \leq 2 \rightarrow P(X \leq 2) = P(0) + P(1) + P(2) \\ = 0.869$$