

$$\underline{\underline{\text{Ex}}}: \quad X \sim \mathcal{U}_{[3, 11]}$$

$$f_x: x \rightarrow \frac{1}{8} \mathbb{1}_{[3, 11]}(x)$$

$$f_x: x \rightarrow \begin{cases} 1/8 & \text{if } x \in [3, 11] \\ 0 & \text{if } x \notin [3, 11] \end{cases}$$