

$$\begin{aligned}
 P(0 \leq X \leq 1) &= \int_0^1 0.1 dx &= 0.1 \cdot x \Big|_{x=0}^{x=1} \\
 &= 0.1(1 - 0) &= 0.1
 \end{aligned}$$

$$P(0 \leq X \leq 2) = 2 \cdot 0.1 = 0.2$$

$$P(2 \leq X \leq 4) = P(0 \leq X \leq 2) = 0.2$$

$$P(X \geq 2) = P(2 \leq X \leq 10) = 8 \cdot 0.1 = 0.8$$