Semana 9 - Exercício 3

$$X \sim U_0 \{1, \dots, n\} \qquad a = 1 \; ; \; b = n$$

a- $\mathbb{E}(x) = \dfrac{a+b}{2} \Rightarrow \mathbb{E}(X) = \dfrac{1+n}{2}$

b- $\text{var}(x) = \dfrac{(b-a+1)^2 - 1}{12} \Rightarrow \text{var}(x) = \dfrac{(n-1+1)^2 - 1}{12}$

$$\Rightarrow \text{var}(X) = \dfrac{n^2 - 1}{12}$$