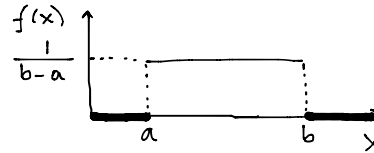


S2 - Chapter 4 - Continuous uniform distribution - Summary

* If X follows a continuous uniform (or rectangular) distribution, then $X \sim U[a, b]$ and

$$f(x) = \begin{cases} \frac{1}{b-a} & a \leq x \leq b \\ 0 & \text{otherwise} \end{cases}$$



$$* E(X) = \frac{a+b}{2}$$

$$* \text{Var}(X) = \frac{(b-a)^2}{12}$$

$$* F(x) = \begin{cases} 0 & x < a \\ \frac{x-a}{b-a} & a \leq x \leq b \\ 1 & x > b \end{cases}$$