

$$X \sim \text{Unif}(-11, 41)$$

$$E(X) = \frac{a+b}{2} = \frac{-11+41}{2} = 15$$

$$\text{Var}(X) = \frac{(b-a)^2}{12} = \frac{(41-(-11))^2}{12} = 228.33$$

$$\text{sd}(X) = 15$$

$$\bar{X} \sim N\left(15, \frac{15}{\sqrt{n}}\right) \leftarrow$$

$$X \sim \text{Expo}\left(\frac{1}{15}\right)$$

$$E(X) = \frac{1}{\theta} = 15$$

$$\text{Var}(X) = \frac{1}{\theta^2} = 15^2$$

$$\text{sd}(X) = 15$$

$$\bar{X} \sim N\left(15, \frac{15}{\sqrt{n}}\right)$$