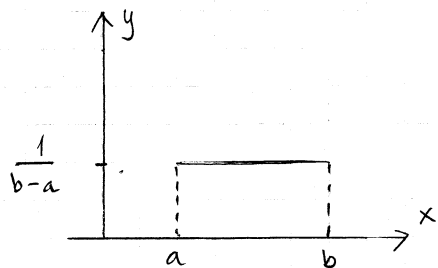


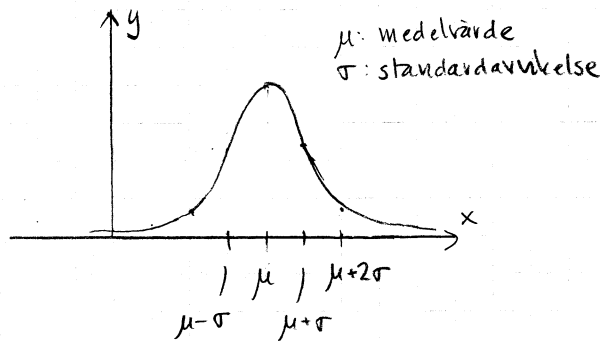
# NÅGRA EXEMPEL PÅ SANNOLIKHETS FÖRDELNINGAR

## Likformig fördelning



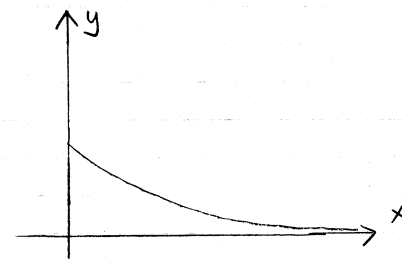
$$f(x) = \begin{cases} \frac{1}{b-a} & \text{om } a \leq x \leq b \\ 0 & \text{annars} \end{cases}$$

## Normalfördelning



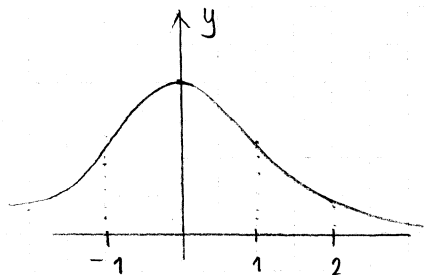
$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

## Exponentialfördelning



$$f(x) = \beta e^{-\beta x} \quad x \geq 0$$

## Standardiserad normalfördelning ( $\mu=0$ , $\sigma=1$ )



$$f(x) = \frac{1}{\sqrt{2\pi}} e^{-\frac{x^2}{2}}$$