

Sample Standard Deviation vs Standard error

2/2/24

$$\sigma = \sqrt{\frac{1}{n-1} \sum_{i=1}^n (x_i - \bar{x})^2}$$

$n \rightarrow \infty \rightarrow$ each sample "weights" less, but have ∞ samples

$$\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}}$$

$$n \rightarrow \infty \quad \sigma_{\bar{x}} \rightarrow 0$$

