

this Δ -method,
 time: we had,
 next Markov
 time: chains,
 catch-up to pic

$$E(\bar{X}_n - \mu_X)$$

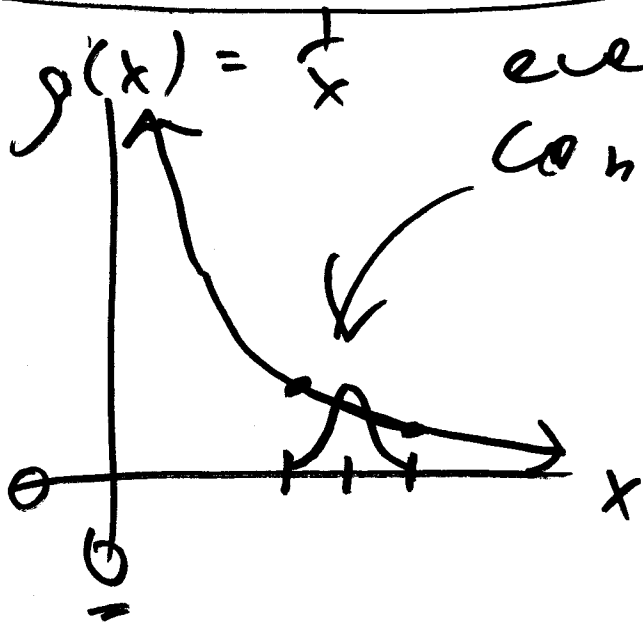
$$E(\bar{X}_n) - \mu_X$$

$$\mu_X - \mu_X = 0$$

STAT 131
 2 Jun 20

(lecture)

(1)



everywhere ($x > 0$)
 continuous &

differentiable

& $g'(x) \neq 0$
 for $x > 0$

$$SD(\bar{X}_n) = \frac{\sigma_X}{\sqrt{n}}$$

$X_i \stackrel{iid}{\sim}$

$$E(X_i) = \mu_X$$

$$V(X_i) = \sigma_X^2$$

in a narrow range of x ,
 nice

by function that is globally (highly) nonlinear
 is approximately linear