

this Δ method
 time:
 next Markov
 time: chains

quiz 9 assigned,
 due by 11.59 pm on
 Sat 28 Jul 2018

AMS 131
 25 Jul 18

①
 quiz 10 is
 cancelled

$$\text{skewness}(\bar{Y}) = E \left(\frac{Y - \mu_Y}{\sigma_Y} \right)^3$$

$$\text{kurtosis}(\bar{Y}) = E \left(\frac{Y - \mu_Y}{\sigma_Y} \right)^4 - 3$$

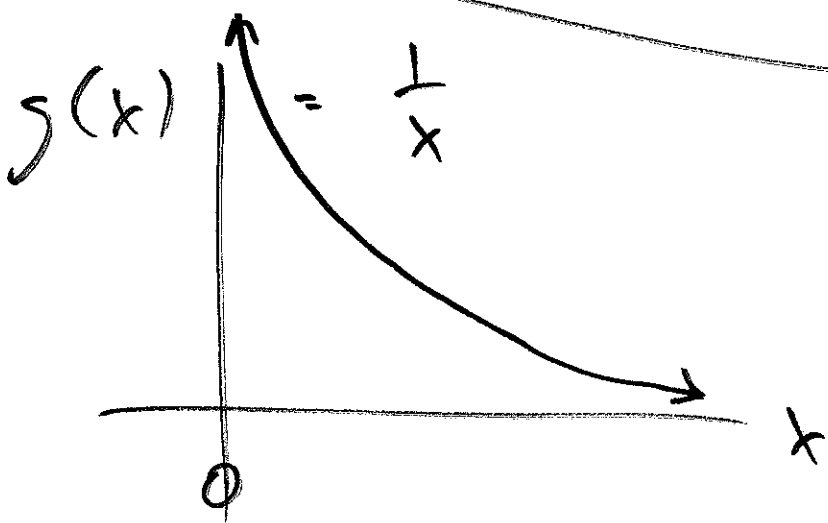
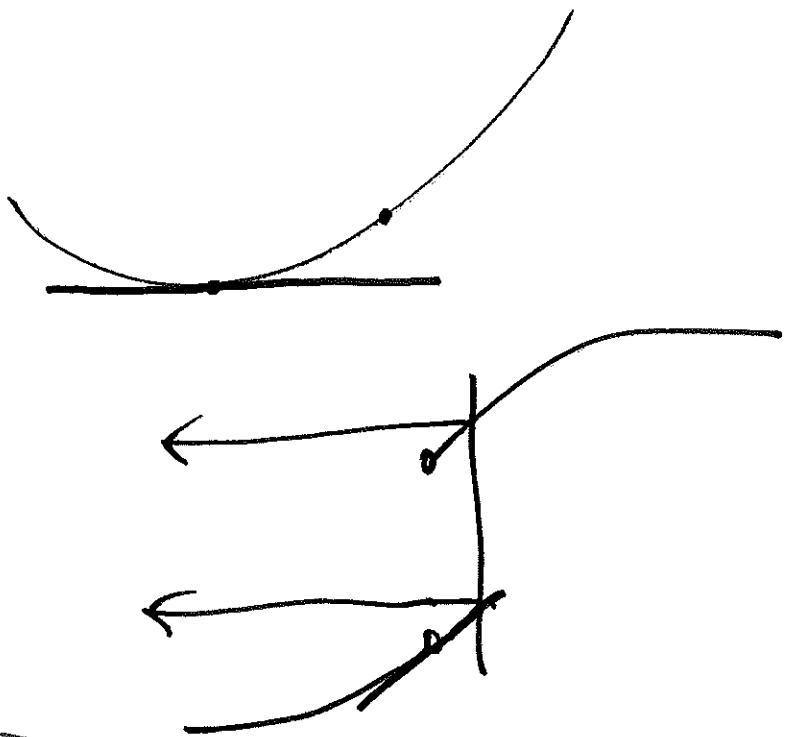
if $Y \sim N(\mu_Y, \sigma_Y^2) \rightarrow \text{skewness}(\bar{Y}) = 0$
 $\rightarrow \text{kurtosis}(\bar{Y}) = 0$
 (9.59)

$$\bar{Y}_n = \frac{1}{n} \sum_{i=1}^n Y_i$$

$Y_i \stackrel{\text{iid}}{\sim} \left\{ \begin{array}{l} \text{mean } \mu_Y \\ \text{SD } \sigma_Y \end{array} \right\}$

$$\text{skewness}(\bar{Y}_n) = \frac{\text{skewness}(Y_i)}{\sqrt{n}}$$

$$\text{kurtosis}(\bar{Y}_n) = \frac{\text{kurtosis}(Y_i)}{n}$$



(10.42)

time series plot

