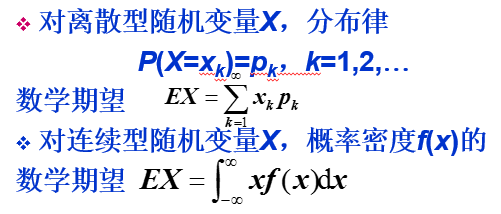
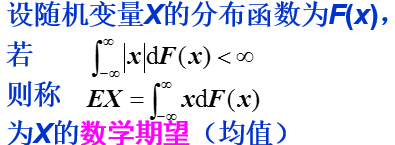
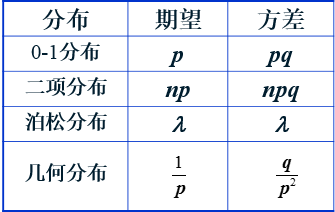
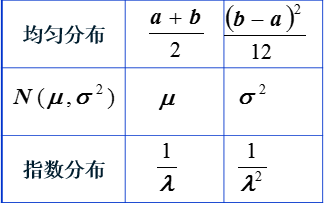
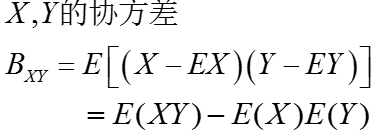
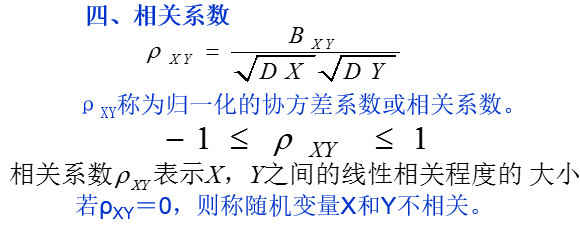
**1.特征函数、母函数、条件期望**；



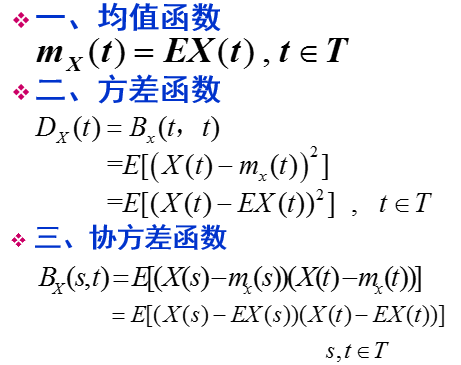


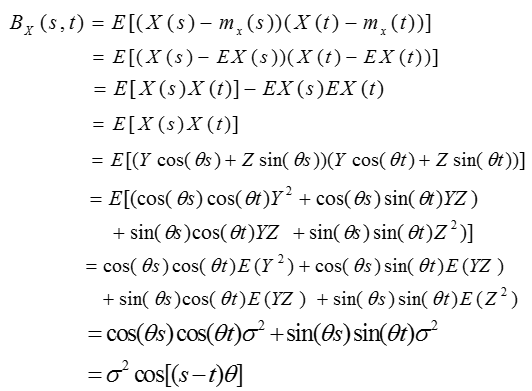
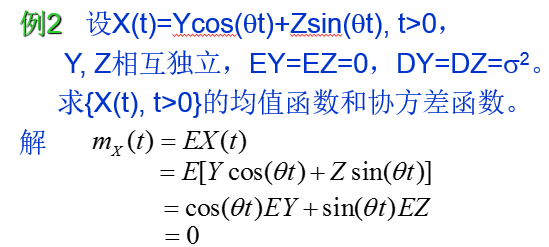


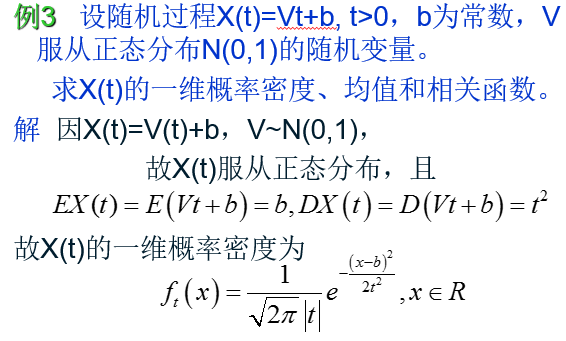


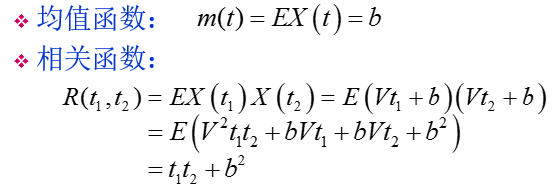


**2.随机过程的分布；**

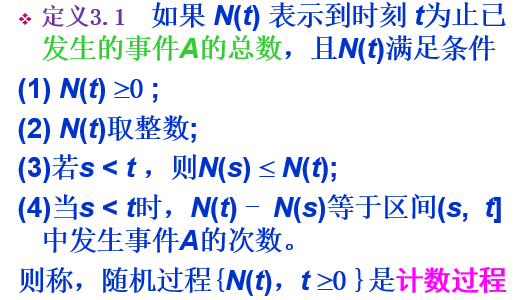


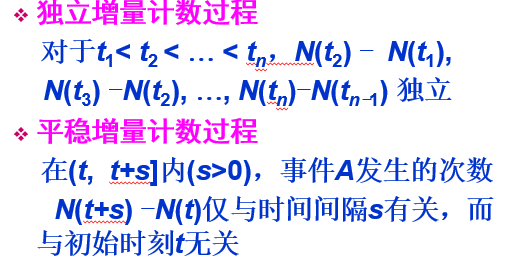


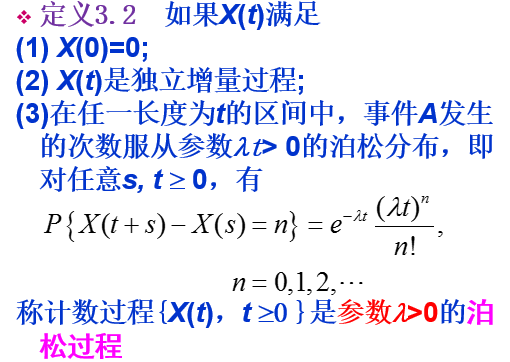


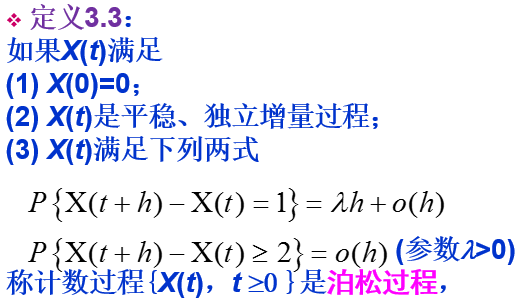


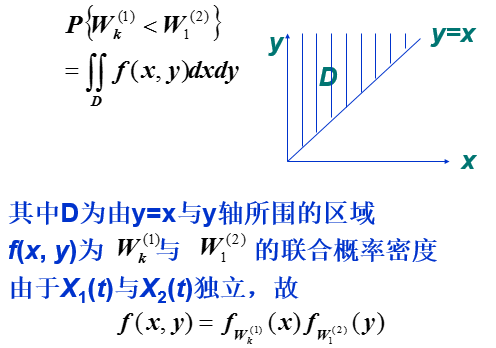
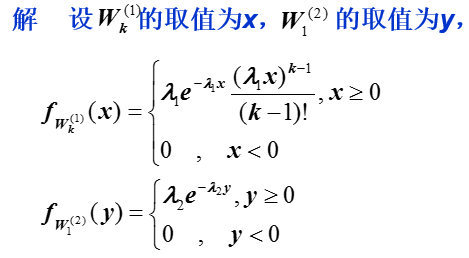
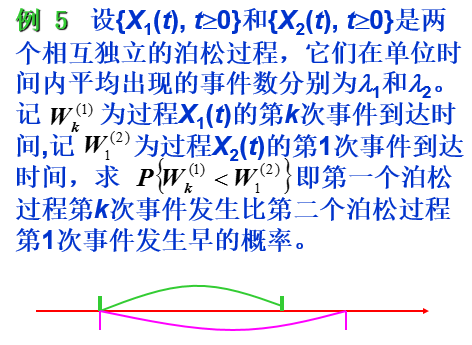
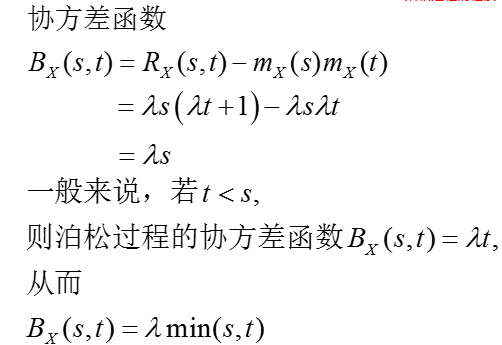
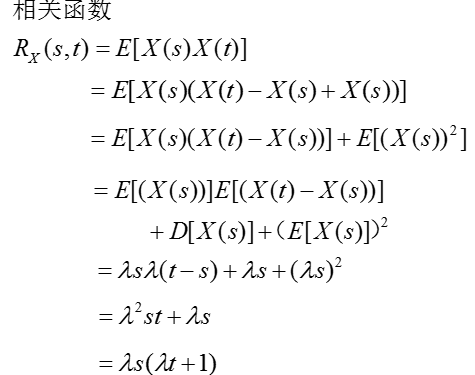
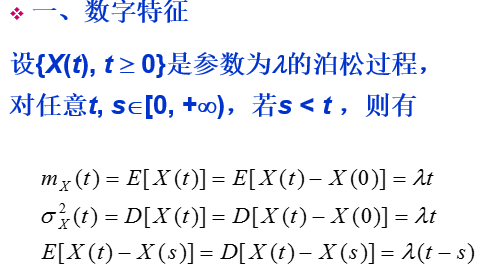
**3.泊松过程**

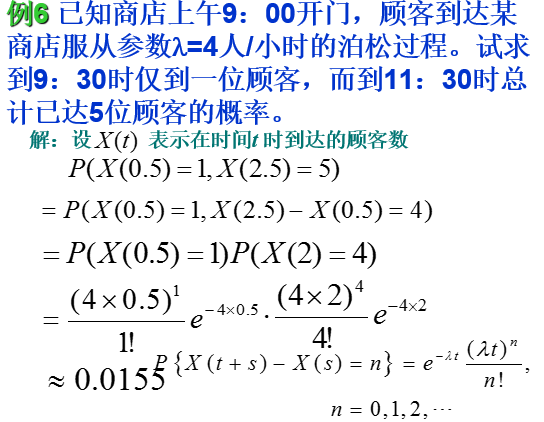
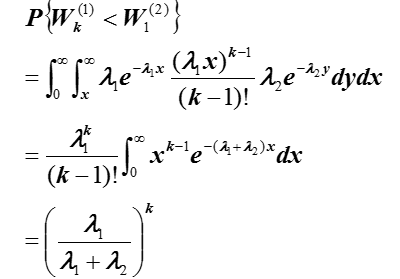


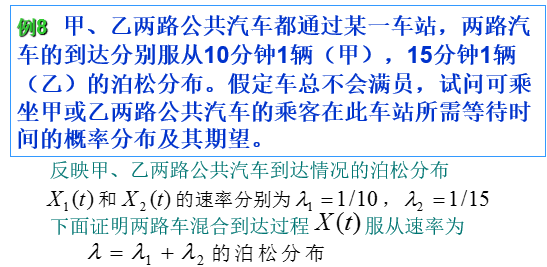


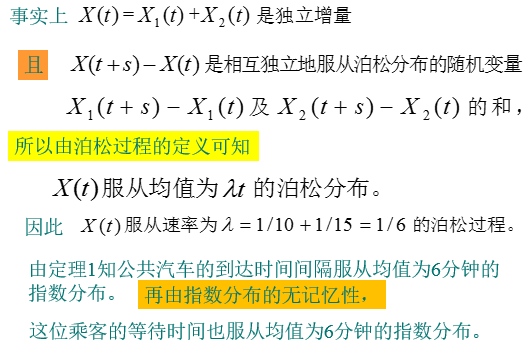


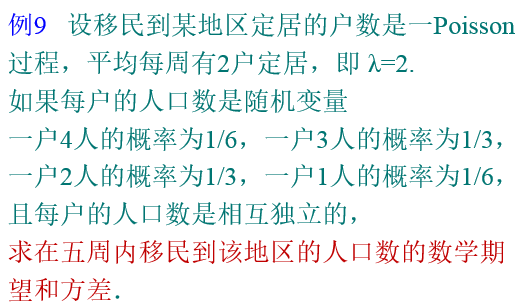


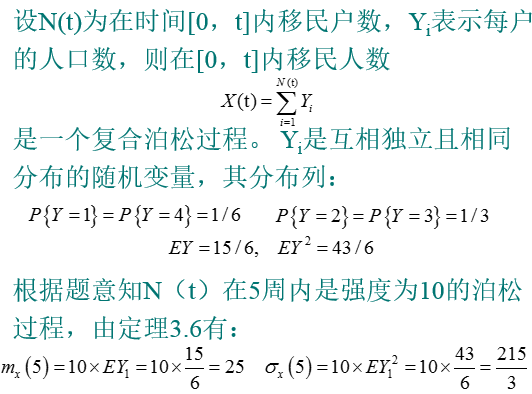




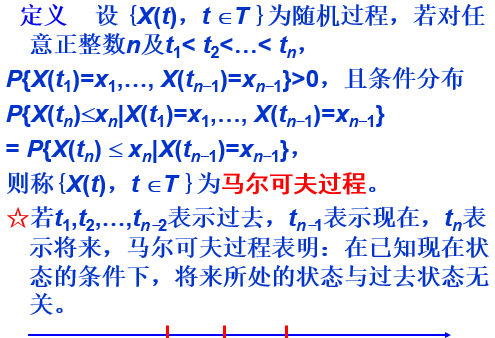


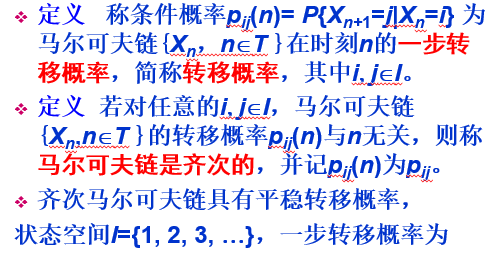


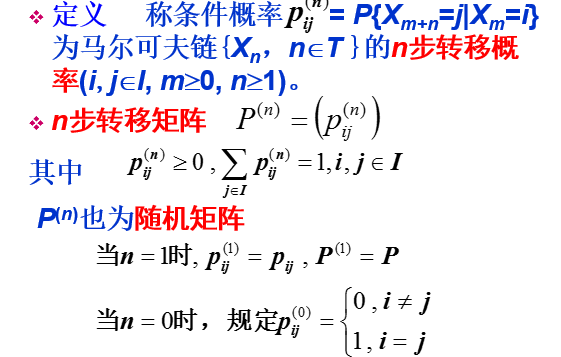


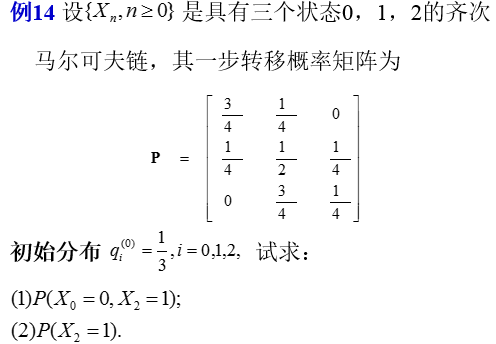
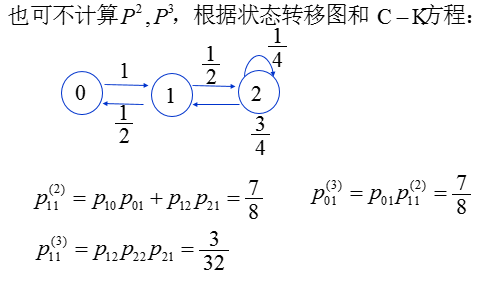
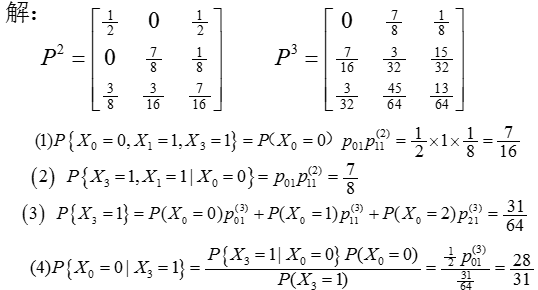
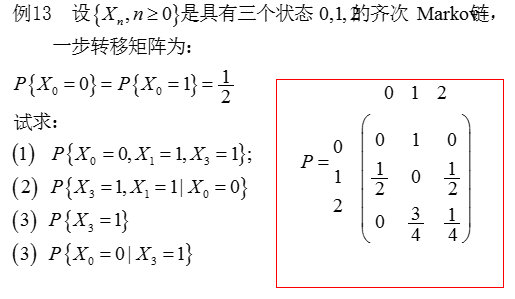


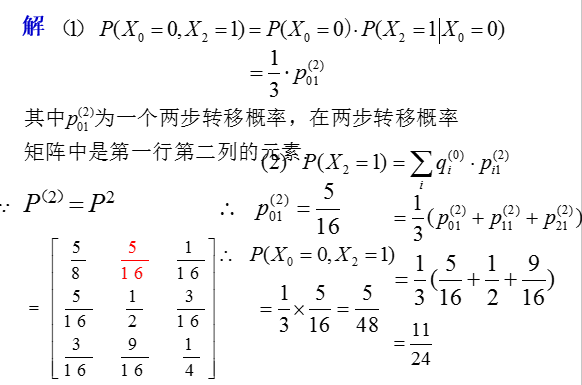
**4.马尔可夫链**











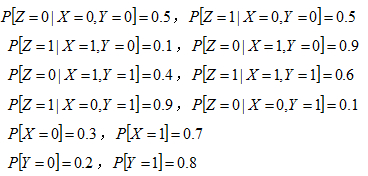
例15 某同学周一上午是否上课，取决于当天情绪及天气情况，且当天是否下雨与心情好坏没有关系。若下雨且心情好，则50%的可能会上课；若不下雨且心情好，则有10%的可能性不上课；若不下雨且心情不好则有40%的可能性上课；若下雨且心情不好，则有90%的可能不会上课。

假设当天下雨的概率为30%，该同学当天心情好的概率为20%，

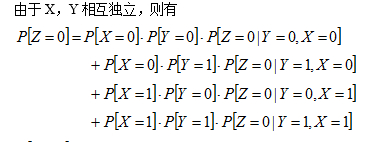
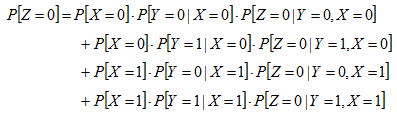
试计算该同学周一上课的可能性是多大？

分析：

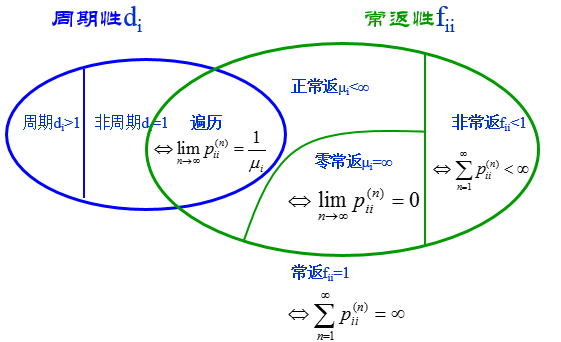
天气情况用随机变量X表示，“0”表示下雨，“1”表示不下雨；心情好坏用Y表示，“0”表示心情好用“0”表示，心情不好用“1”表示；是否上课用随机变量Z表示，“0”表示上课，“1”表示不上课。由题意可知

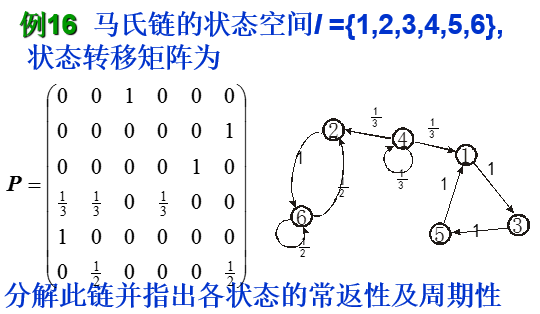


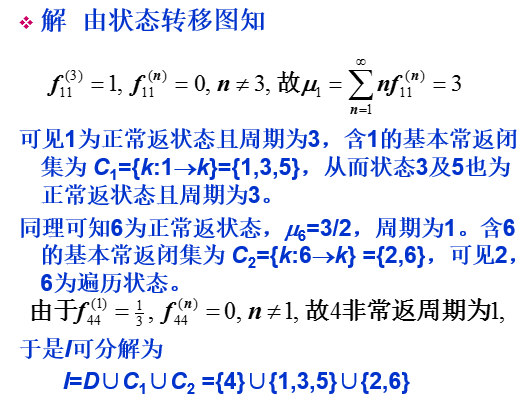
**即题目实际上给出了八个个条件概率和四个概率**

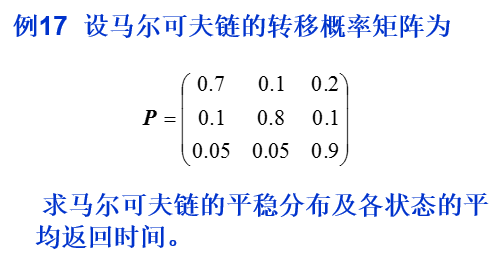


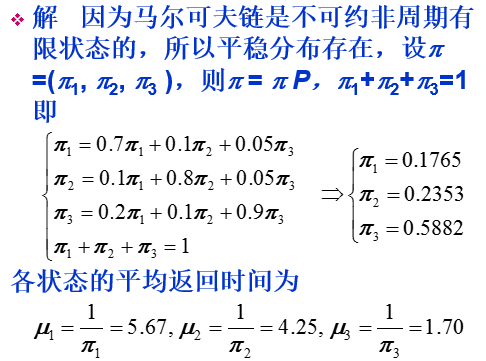


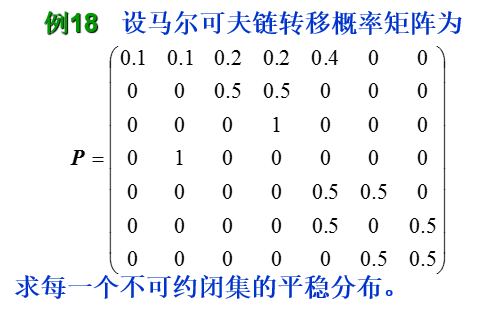


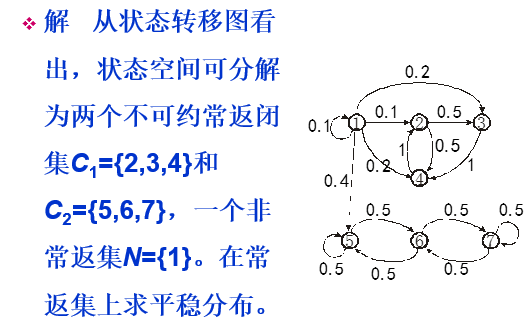


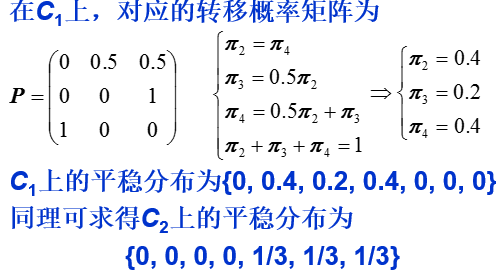




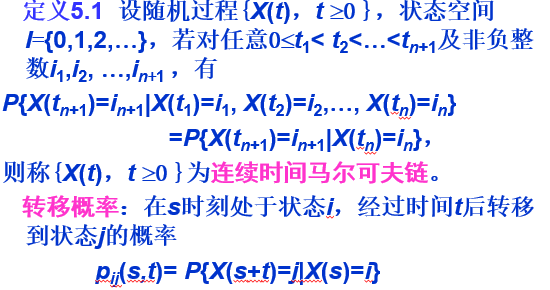


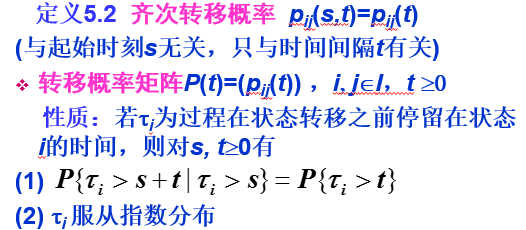


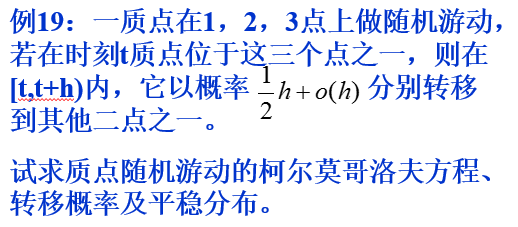


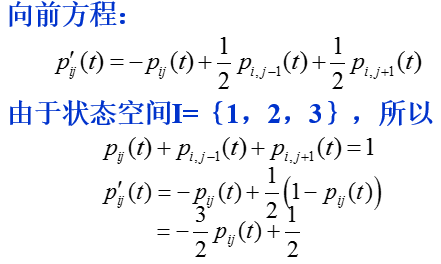


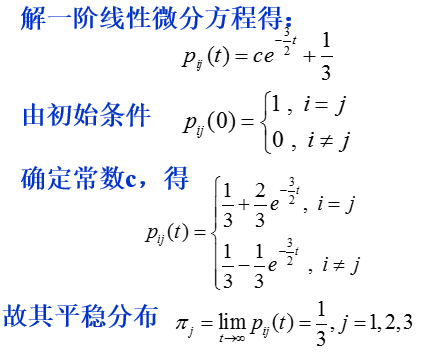
**5.连续时间的马尔可夫链.**











**6.平稳过程**

**如果过程的统计特性不随时间的推移而变化, 则称之为平稳随机过程**

