CHAPTER OVERVIEW

15: Renewal Processes

A *renewal process* is an idealized stochastic model for “events” that occur randomly in time (generically called renewals or arrivals). The basic mathematical assumption is that the times between the successive arrivals are independent and identically distributed. Renewal processes have a very rich and interesting mathematical structure and can be used as a foundation for building more realistic models. Moreover, renewal processes are often found embedded in other stochastic processes, most notably Markov chains.
