Example 1 ch. 1 [H]  

\[ \lambda = 3 \quad \Rightarrow \text{CPU} \quad | \quad M = 5 \]

Let \( E[T] \) be the mean response time of the queueing system above.

Suppose that I will double tomorrow. You are asked to buy a faster CPU to keep the MRT the same.
Should you (a) double the CPU speed? (b) More than double the CPU speed? or (c) Less than double the CPU speed?

Example 2 ch. 1 [ff] \[ N=6 \text{ jobs} \]

(closed system)

\[ \frac{1}{2} \]

Server 1

\[ M=\frac{1}{3} \quad \Rightarrow \quad 2/3 \]

Faster server increases neither MRT or throughput appreciably.
Design Example 3 [Code]
Design Example 4 (Ch. 1 (H))
(Task assignment in a server farm)
(Task assignment policies)