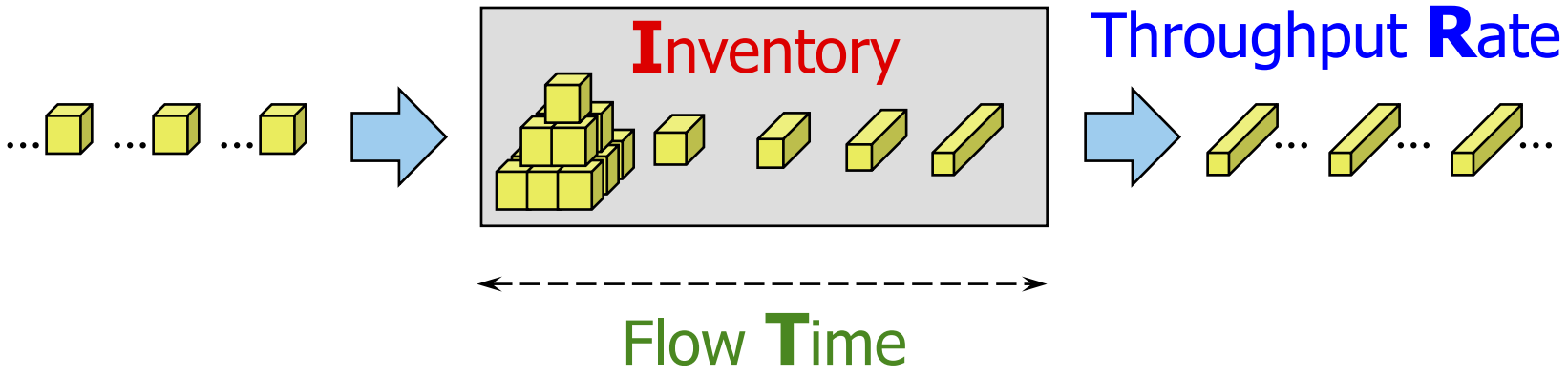
Little's Law

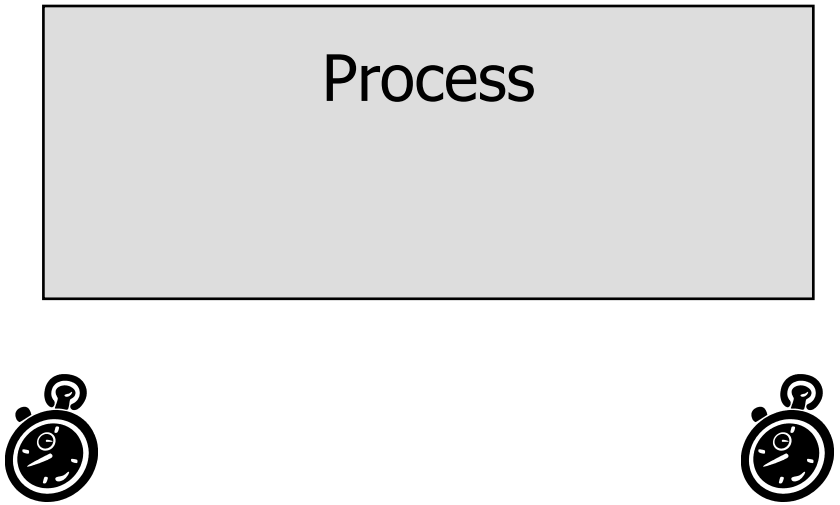
Inventory = Throughput **R**ate × Flow **T**ime



Little's Law: I = R × T

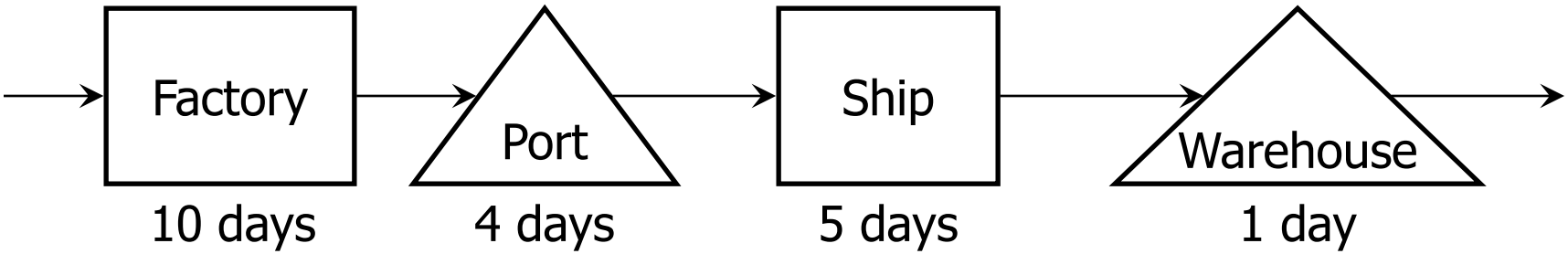
Inventory = Throughput Rate × Flow Time

Input rate: 2 customers per sec



Example 1: Walmart's Supply Chain

- Wal-Mart imports 3000 sweatshirts from an overseas supplier every month. The products go through several stages before arriving at Wal-Mart stores:



- How many sweatshirts in each stage, and in the entire supply chain?

- Little's Law can be applied to any part of the process.

Example 2: Insurance Company

- An insurance company processes 10,000 claims per year. The average processing time is 3 weeks. How many claims are in the system on average? (Assuming 50 weeks in a year)
- R= ____ claims / week, T = ___ Weeks, I = ____ claims

- Now, the company reduces its processing time by 80%. How many claims are in the system on average?
- R= ____ claims / week, T = ____ Weeks, I = ____ claims

- A manager can influence any one of these measures by controlling the other two.