

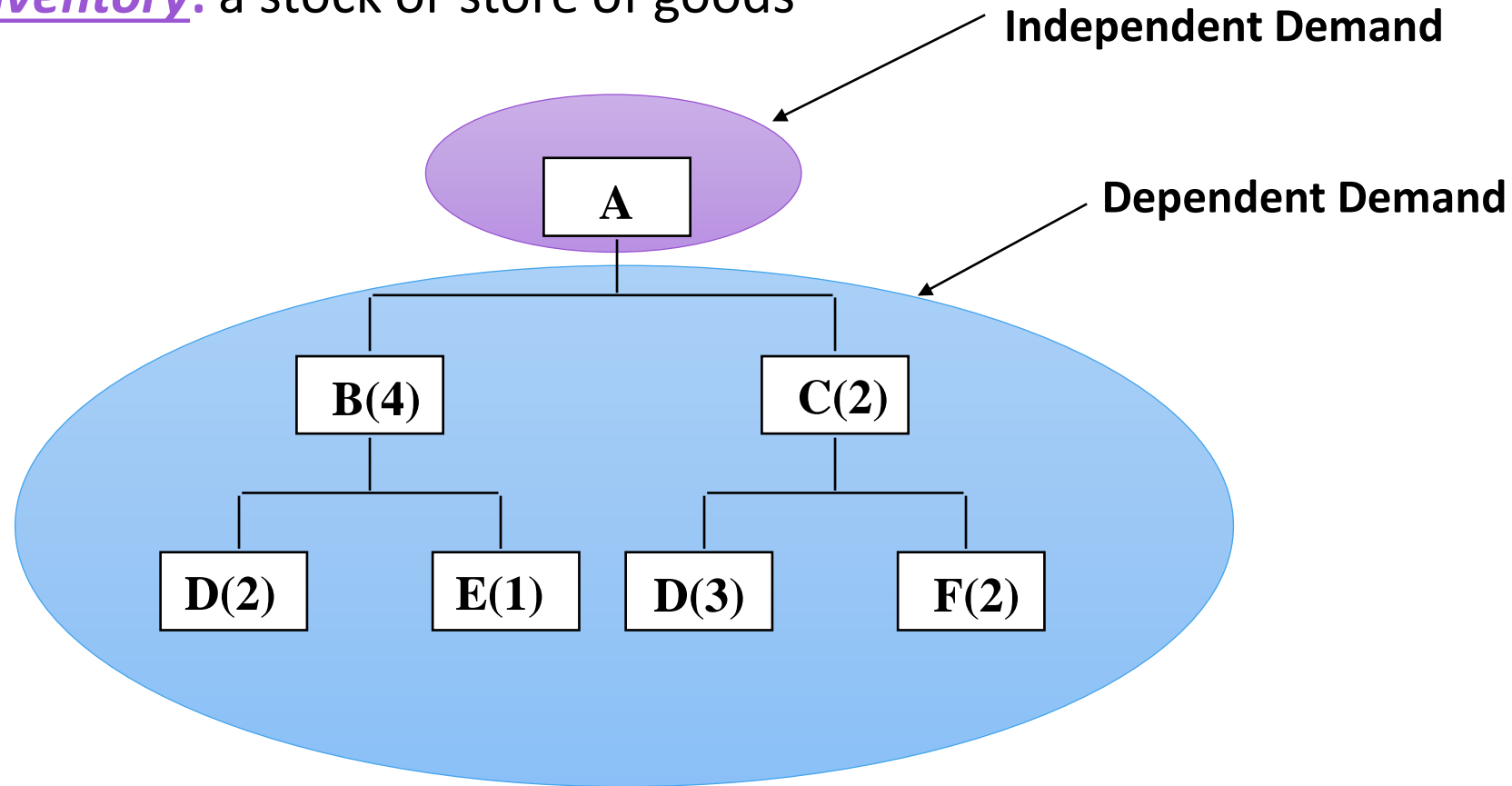


INVENTORY MANAGEMENT

RAPID FIRE REFRESHER

Inventory

Inventory: a stock or store of goods



**Independent demand is uncertain.
Dependent demand is certain.**

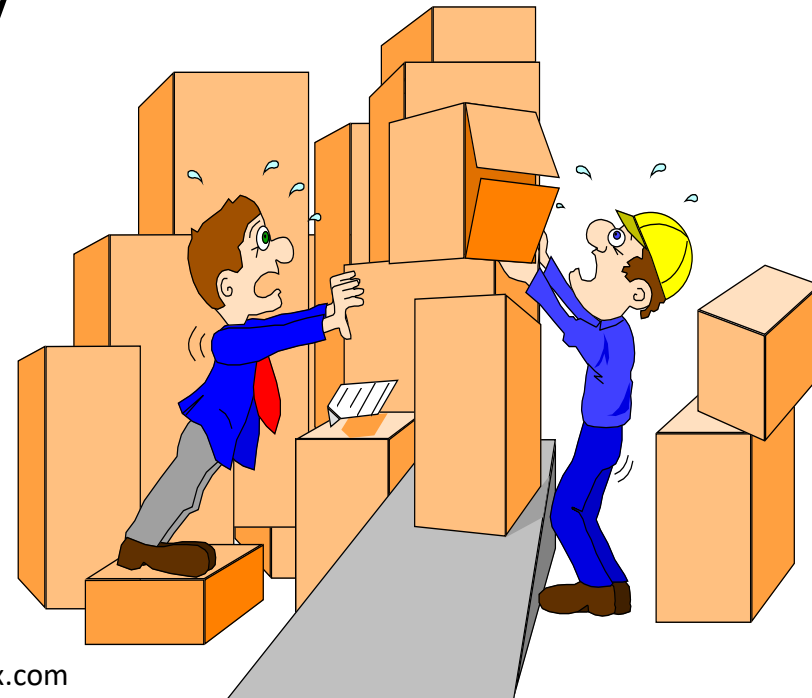
Inventory Counting Systems

- Periodic System (T or P System)

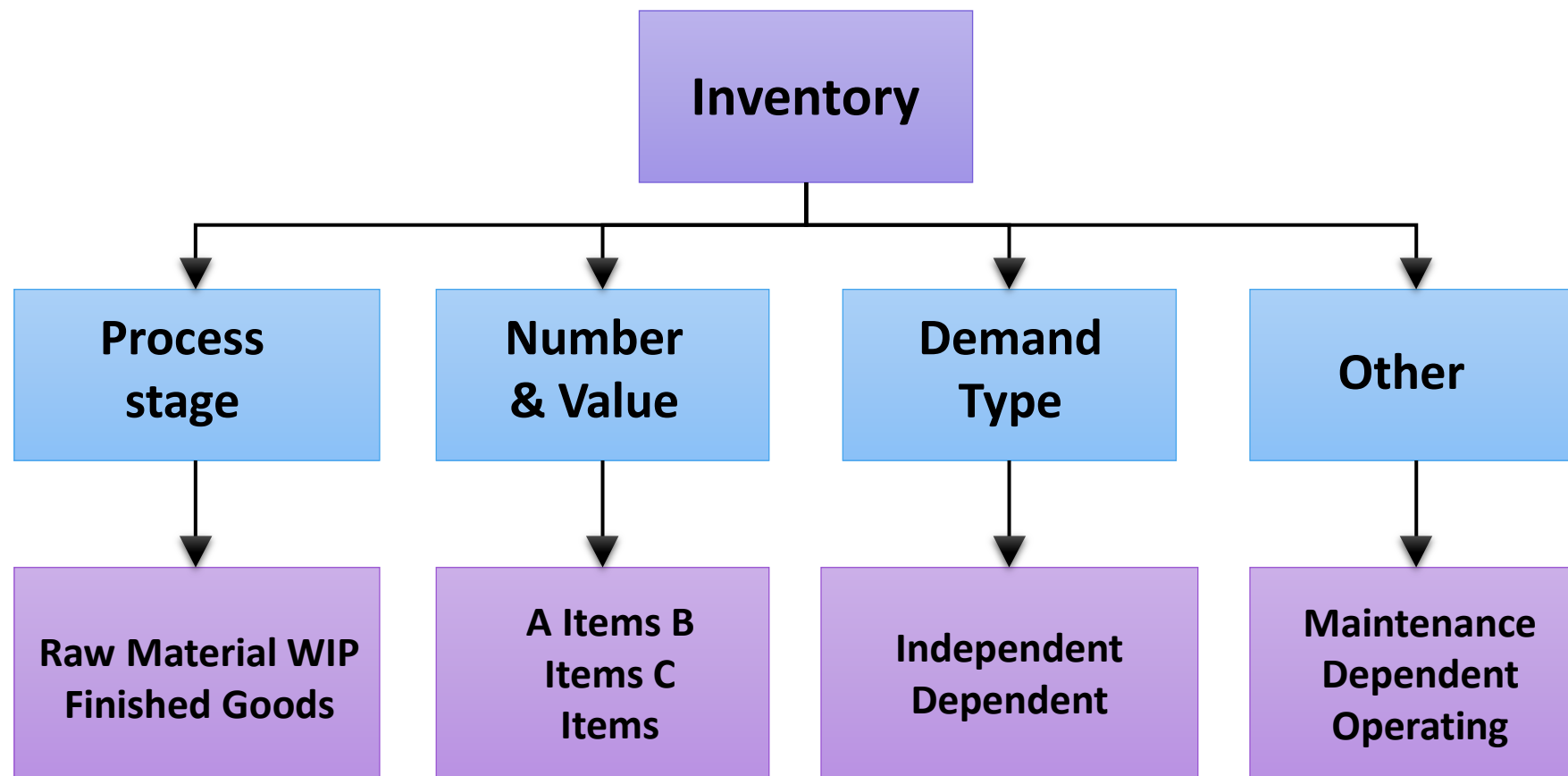
Physical count of items made at periodic intervals

- Perpetual Inventory System (Q System)

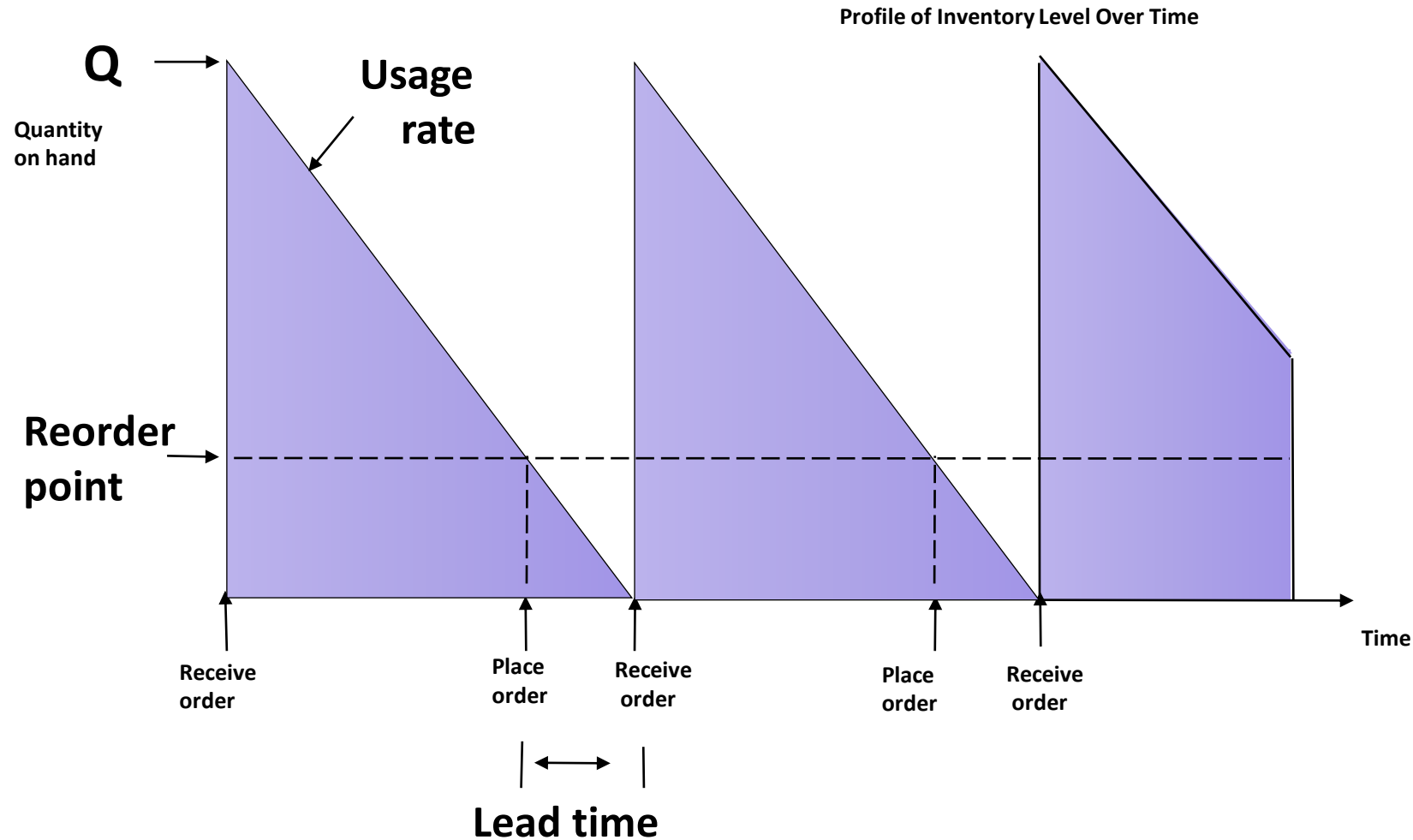
System that keeps track of removals from inventory continuously, thus monitoring current levels of each item



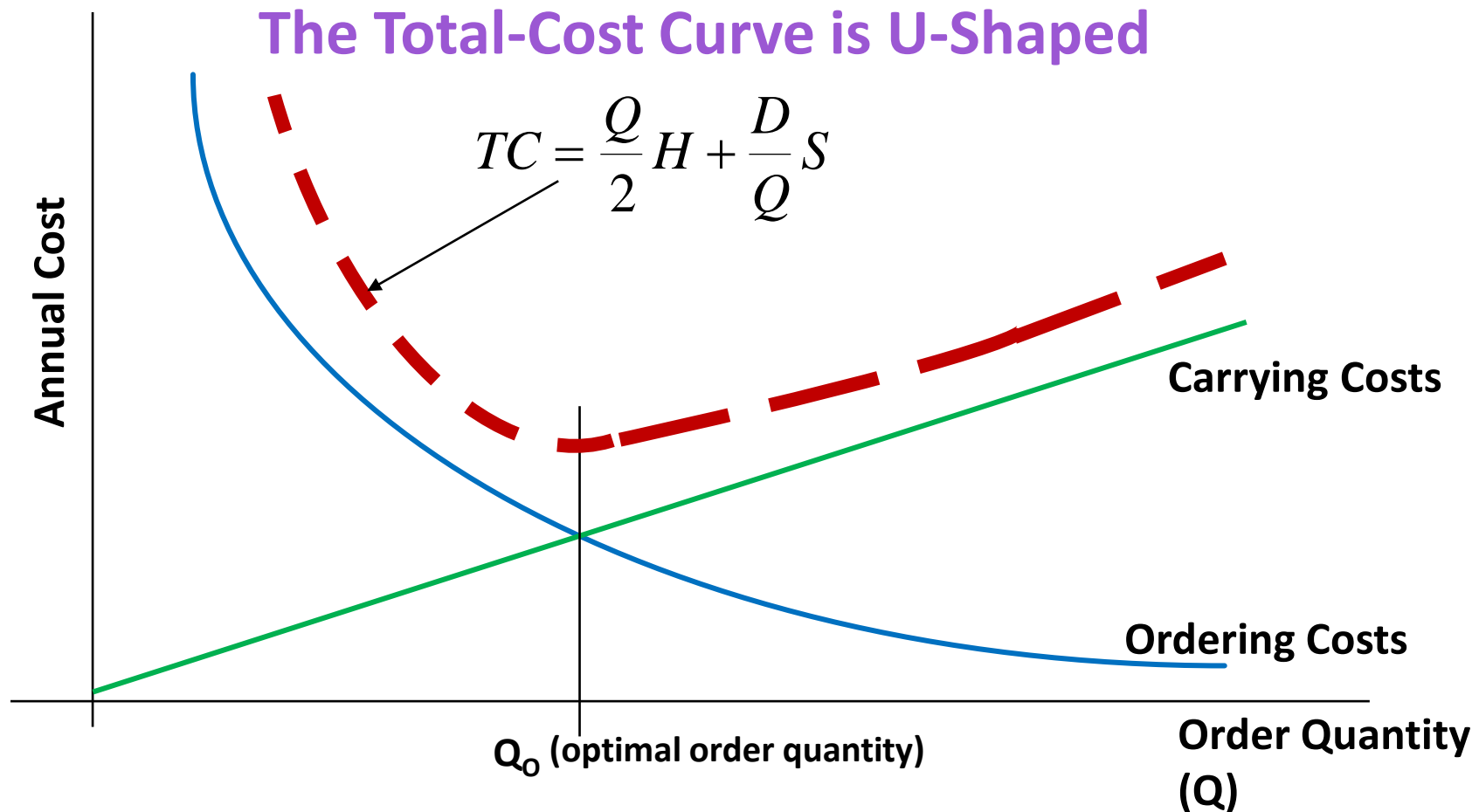
Inventory Classifications



The Inventory Cycle



Cost Minimization Goal



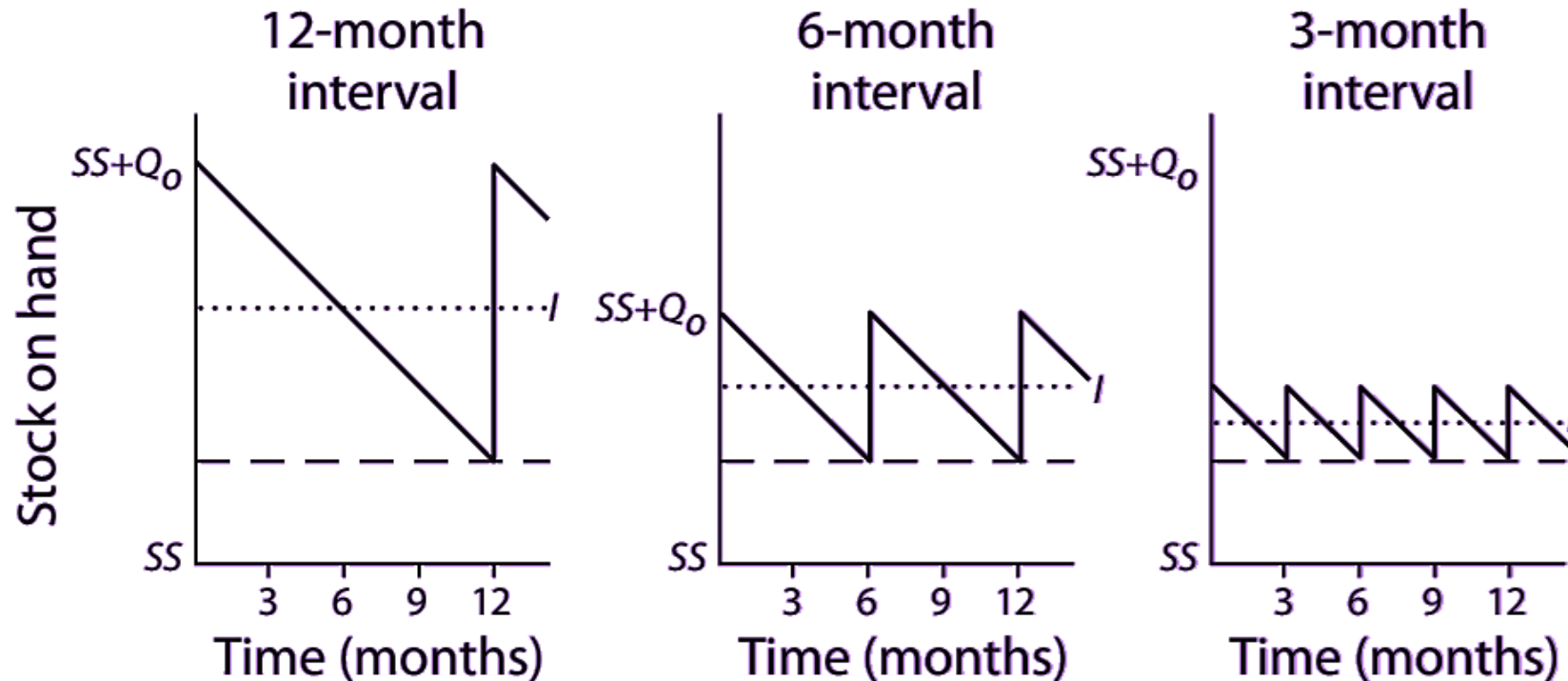
Deriving the EOQ

At EOQ:

$$\frac{Q}{2}H = \frac{D}{Q}S$$

$$EOQ = \sqrt{\frac{2DS}{H}} = \sqrt{\frac{2(\text{Annual Demand})(\text{Order or Setup Cost})}{\text{Annual Holding Cost}}}$$

Order Size and Order Cycle



Key: I = average inventory Q_0 = order quantity SS = safety stock