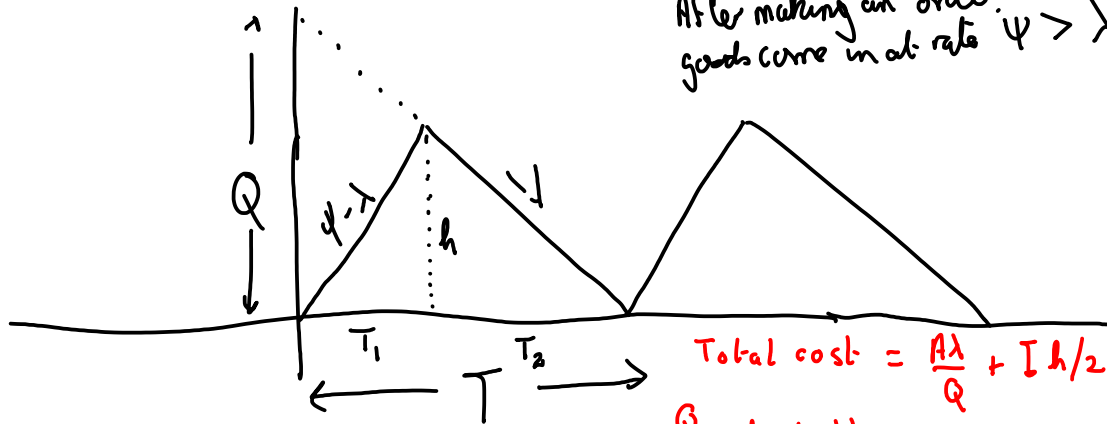


Model 3

10/15/14

After making an order,
goods come in at rate $\psi > \lambda$.



$$\text{Total cost} = \frac{A\lambda}{Q} + I h/2$$

4 linear equations $\rightarrow T = \frac{Q}{\lambda}; h = (\psi - \lambda)T_1 = \lambda T_2; T_1 + T_2 = T$

$$h = \left(\frac{\psi - \lambda}{\psi} \right) Q$$

$$\text{Total Cost} = \frac{A\lambda}{Q} + \frac{IQ}{2} \left(1 - \frac{\lambda}{\psi} \right)$$

$$\text{Optimal: } Q = Q_w \left(\frac{\psi}{\psi - \lambda} \right)^{\frac{1}{2}}$$

$$K = K_w \left(\frac{\psi - \lambda}{\psi} \right)^{\frac{1}{2}}$$