Problem 3.1

Q more cost - effective ?

Example 3.2 , $\lambda' = 2$ part/h.

Solution Cost $(1) = \dfrac{100}{200} + L_1 \cdot 1$

$$L_1 = \dfrac{\lambda'}{\mu_1 - \lambda'} = \dfrac{2}{10 - 2} = \dfrac{1}{4} = 0.25$$

Cost $(1) = 0.5 + 0.25 = \$ 0.75$/h.

Cost $(2) = \dfrac{180}{200} + L_2 \cdot 1$

$$L_2 = \dfrac{\lambda'}{\mu_2 - \lambda'} = \dfrac{2}{20 - 2} = \dfrac{1}{9}$$

Cost $(2) = \$ 1.0111$/h.

1st system is more cost - effective.