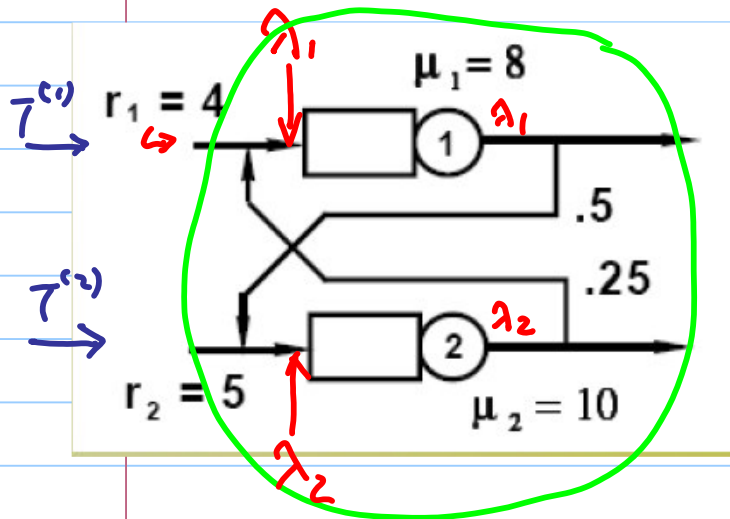
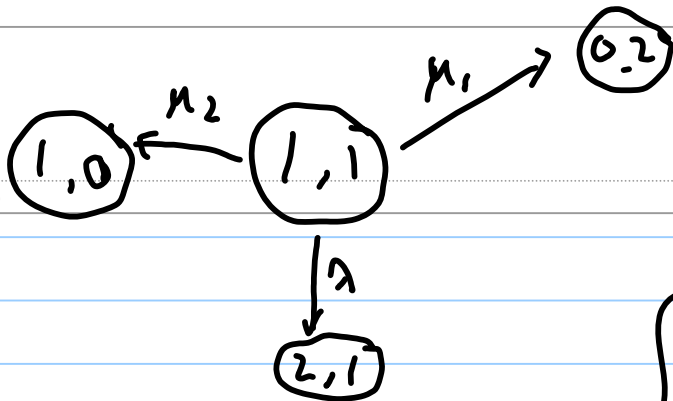


$$\pi_i = (1-\rho)\rho^i$$

Note Title

10/21/2013



$$\begin{cases} \lambda_1 = r_1 + 0.25 \lambda_2 \\ \lambda_2 = r_2 + 0.5 \lambda_1 \end{cases}$$

$$\lambda = \lambda T$$

$$r_1 + r_2 = 9$$

$$T^{(1)} \begin{cases} \text{queue 1 out} & \times 0.5 \\ \text{queue 2} + T^{(2)} & \times 0.5 \end{cases}$$

$$T^{(1)} = \frac{1}{2} \frac{1}{\mu_1 - \lambda_1} + \frac{1}{2} \left[\frac{1}{\mu_1 - \lambda_1} + T^{(2)} \right]$$

$$T^{(2)} = \frac{3}{4} \frac{1}{\mu_2 - \lambda_2} + \frac{1}{4} \left[\frac{1}{\mu_2 - \lambda_2} + T^{(1)} \right]$$

$$E[T^{(1)}] = 1/(\mu_1 - \lambda_1) + E[T^{(2)}]/2$$

$$E[T^{(2)}] = 1/(\mu_2 - \lambda_2) + E[T^{(1)}]/4$$

