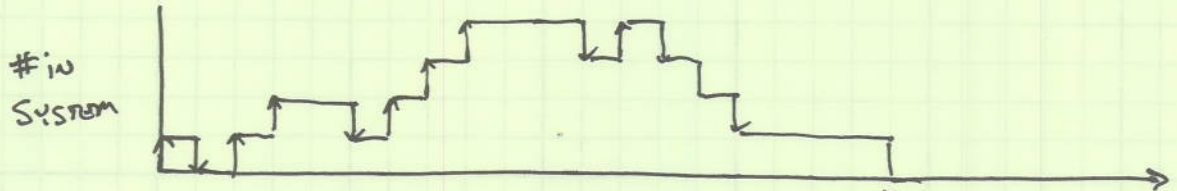


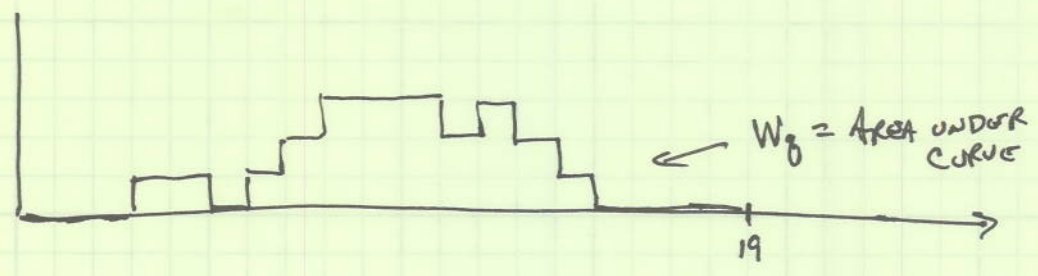
# First 7 Customers



ARRIVALS 1 2 3 4 5 6 7 19

DEPARTURES 1 2 3 4 5 6 7

QUEUES  
 --- 3 3 - 4 4 4 4 4 5 5 6 7 ---  
           5 5 5 5 6 6 7  
           6 6 6 7



$$\lambda = \frac{7}{19}$$

$$\mu = \frac{7}{18}$$

$$\rho = \frac{\lambda}{c\mu} = \frac{7/19}{1 \cdot 7/18} = \frac{7}{19} \cdot \frac{18}{7} = \frac{18}{19}$$

$$W_q = \frac{22}{7}$$

$$W = \frac{40}{7}$$

$$L_q = \lambda \cdot W_q = \frac{7}{19} \cdot \frac{22}{7} = \frac{22}{19}$$

$$L = \lambda \cdot W = \frac{7}{19} \cdot \frac{40}{7} = \frac{40}{19}$$

| Customer | $T_q$ |
|----------|-------|
| 1        | 0     |
| 2        | 0     |
| 3        | 2     |
| 4        | 5     |
| 5        | 6     |
| 6        | 6     |
| 7        | 3     |
|          | <hr/> |
|          | 22    |