

$$0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \rightarrow 1 \oplus 0 \rightarrow 1 \oplus 0 \oplus 1 \oplus 0$$

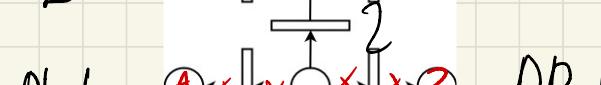
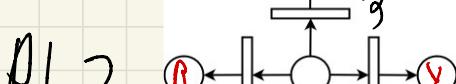
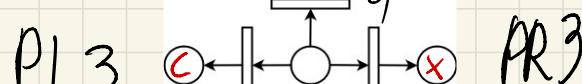
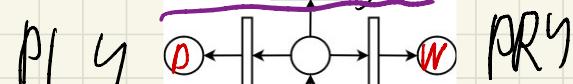
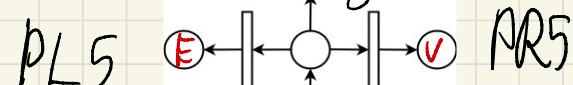
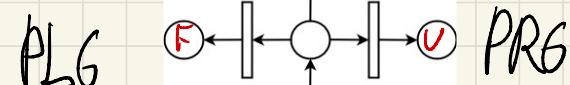
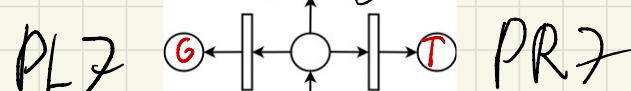
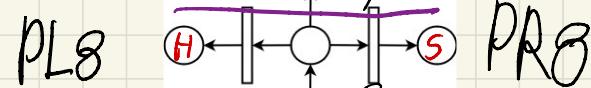
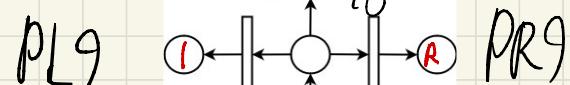
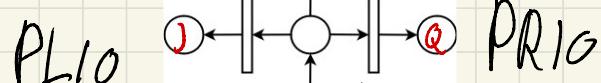
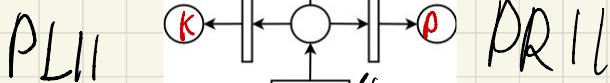
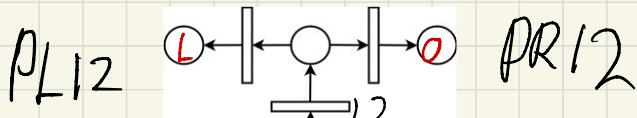
          
↓

$$\begin{array}{ccccccccc} 1 & & 2 & & 3 & & & & \\ 0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \rightarrow 1 \oplus 0 \rightarrow 1 \oplus 0 \oplus 1 \oplus 0 \end{array}$$

          
↓

$$\begin{array}{ccccccccc} 1 & & 2 & & 3 & & & & \\ 0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \oplus 1 \oplus 0 \rightarrow 1 \oplus 0 \rightarrow 1 \oplus 0 \oplus 1 \oplus 0 \end{array}$$

          
↓  
0



PAL

PL

PR C

PA00

$0 \leftarrow | + 0 + | + 0 + |$

1

2

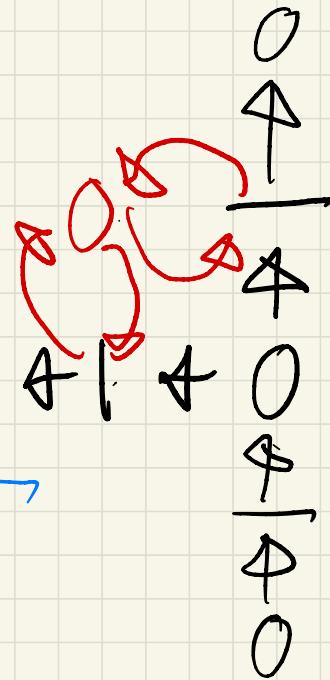
3

Use a shuffled list to decide order, decide firing time on chance

$0/3$  chance 1st gets selected  
 $1/3$  2nd  
 $2/3$  3rd

$0 + 1 + 0 + 1 + 0 + 1 + 0$

seats



aisle

A 1: figure out aisle graphs

R 2: figure aisle blocking

S 3: figure out seat shuffle  
delay + math proof

# Seat Shuffle overview









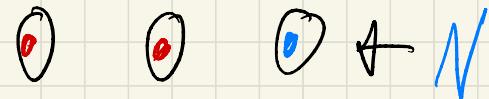




block  $\frac{1}{2}$  of  
the time







block  $\frac{2}{3}$  of the  
time

$$\text{first want be blocked regardless} \\ \left(\frac{1}{2} + \frac{2}{3}\right)/3 = \frac{7}{18}$$

