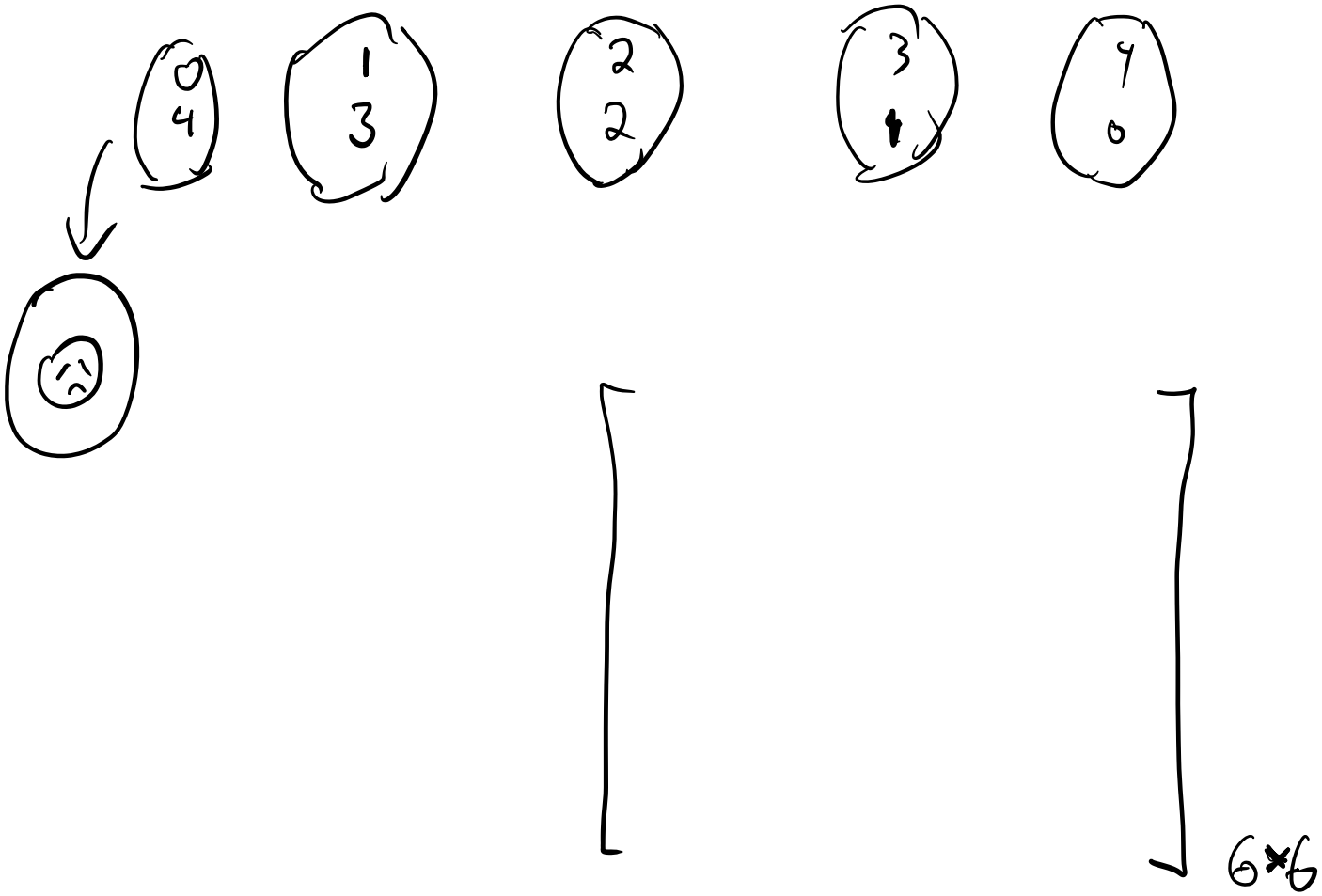
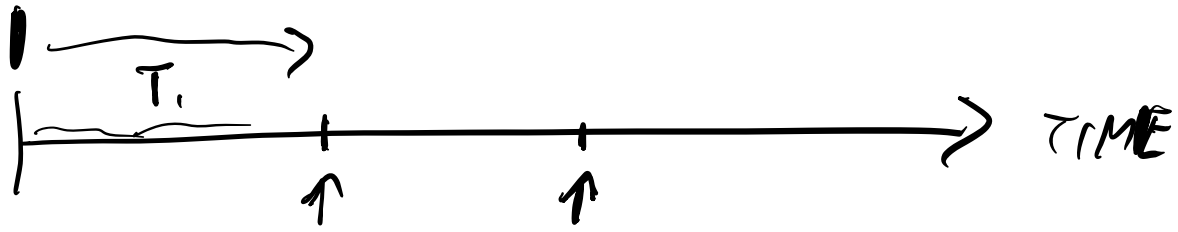
PS3



$T_{2 \to ☹} = 96.7$ TRIPS

PS4



POISSON RATE λ

$$T_1 \sim \text{EXP}(\lambda)$$

DENSITY
$$p_T(t) = \lambda e^{-\lambda t} \qquad t \geq 0$$

CUMULATIVE
$$\mathbb{P}(t < T) = 1 - e^{-\lambda t}$$

NONHOMOGENOUS POISSON

$$\mathbb{P}(t \leq T) = 1 - e^{-\int_0^t \lambda(\tilde{t})\, d\tilde{t}}$$

↑ HAZARD FUNCTION

ASIDE

PS4 a

$$E[T] = 30 \text{ MIN}$$

$$\lambda = \frac{1}{30} \text{ MIN}^{-1}$$