

Let  $p$  be the probability that player 1 picks T.

$$\begin{aligned}\pi_2(L) &= 1 * p + 2(1 - p) \\ &= p + 2 - 2p \\ &= 2 - 1p\end{aligned}$$

$$\begin{aligned}\pi_2(R) &= 2 * p + 1(1 - p) \\ &= 2p + 1 - p \\ &= 1 + p\end{aligned}$$

Setting them equal gives:

$$p = \frac{1}{2}$$

Let  $q$  be the probability that player 2 picks L.

$$\begin{aligned}\pi_1(T) &= 0 * q + (1 - q) * 0 \\ &= 0\end{aligned}$$

$$\begin{aligned}\pi_1(B) &= 2 * q + 0 * q \\ &= q\end{aligned}$$

Setting them equal gives:

$$q = 0?$$