

Weekly 5

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Table 1: Payouts for Weekly 5 problem

Type	Proposer	Responder	Payouts
A	L	D	2, 4
A	L	U	0, 0
A	R	D	1, 3
A	R	U	1, 1
B	L	D	4, 0
B	L	U	1, 4
B	R	D	3, 2
B	R	U	4, 2

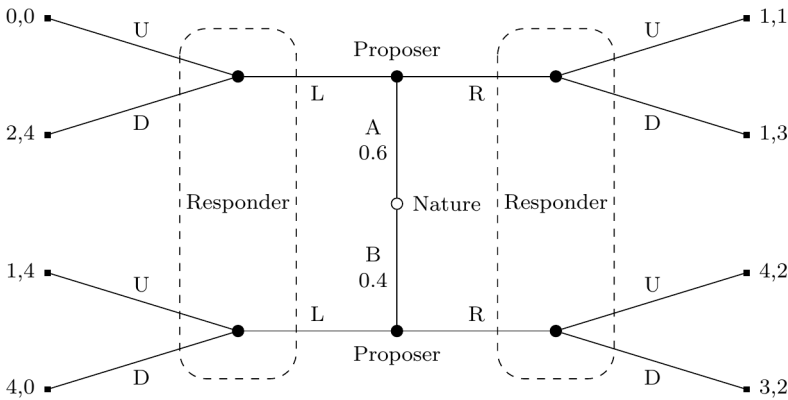


Figure 1: Tree for Weekly 5

In this tree, Proposer has four possible strategies:

1. Left if A, Left if B
2. Left if A, Right if B
3. Right if A, Left if B
4. Right if A, Right if B

And Responder has four possible strategies

1. Up if Left, Up if Right
2. Up if Left, Down if Right
3. Down if Left, Up if Right
4. Down if Left, Down if Right

That leads to 16 possible combinations of strategies. For each of these 16, work out

- A. What Proposer's *expected* payout is.
- B. What Responder's *expected* payout is.

Once you've done that, for each pair work out whether it is:

- A. A pooling equilibrium;
- B. A separating equilibrium; or
- C. Not an equilibrium.

Answers

Table 2: Expected values for Weekly 1

P1	DD	DU	UD	UU
LL	2.8, 2.4	2.8, 2.4	0.4, 1.6	0.4, 1.6
LR	2.4, 3.2	2.8, 3.2	1.2, 0.8	1.6, 0.8
RL	2.2, 1.8	2.2, 0.6	1, 3.4	1, 2.2
RR	1.8, 2.6	2.2, 1.4	1.8, 2.6	2.2, 1.4

The pooling equilibria are

- LL, DD
- LL, DU
- RR, UD

The only separating equilibrium is:

- LR, DU