1.

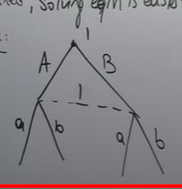
(a)

EE 1 P1: (1) 7/11 4/11 0 EP= 17/5 P2: (1) 0 3/5 2/5 EP= 53/11

EE 2 P1: (2) 1 0 0 EP= 4 P2: (2) 0 0 1 EP= 7

EE 3 P1: (3) 0 1 0 EP= 5 P2: (3) 0 1 0 EP= 8

(b)



(c)

i.

v(1,1) <v(1,2) or v(1,1) < v(2,1)

v(2,2) <v(1,2) or v(2,2) < v(2,1)

v(2,1) <v(1,1) or v(1,2) < v(2,2)

ii.

Rock paper scissor as counterexample

2.

(a)

Min 5y1+8y2

Subject to:

-y1+3y2 >= -1

y1 >=2

y1+y2>=0

y1 >=0

(b)

X1= any

X2=8/3

X3=0

Max= 23/3

Y1=1

Y2=1/3

Min=23/3

(c)

((1,0), (0,1))

(a1(t1=+1,t1=−1),a2(t2=+1,t2=−1))

1/2\*1+1/2\*(-1) = 0

3.

(a)

(3/5, 0, 2/5, 0), (3/5, 2/5) v1=6/5 v2=6/5

(0, 3/5, 2/5, 0), (3/5, 2/5) v1=6/5 v2=6/5

(b)

A get 1, pay = 18 – (7 + 8) = 3

B get 3, pay = 17- (4+8) = 5

C get 2, pay = 14- (4+7) = 3

(c)