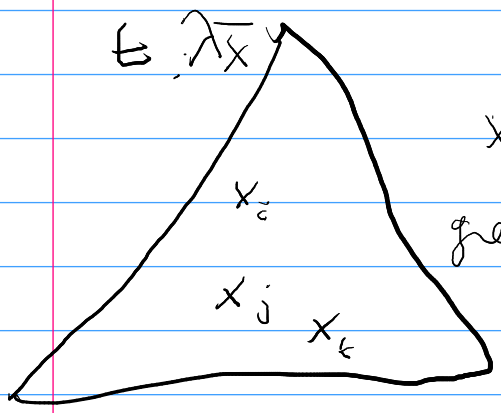
$x\, u_1^1 \dots u_n^1 = r^1$

$\vdots$

$x\, u_1^m \dots u_n^m \neq r^m$

$t : \lambda \bar{x}$



$x_i\, v_1 \dots v_n$ — choice var.

game moves to different args in different eq.

$x_i\, v_1 \dots v_n$ — contrib. var

game changes rhs on going to one of the args.

Claim:

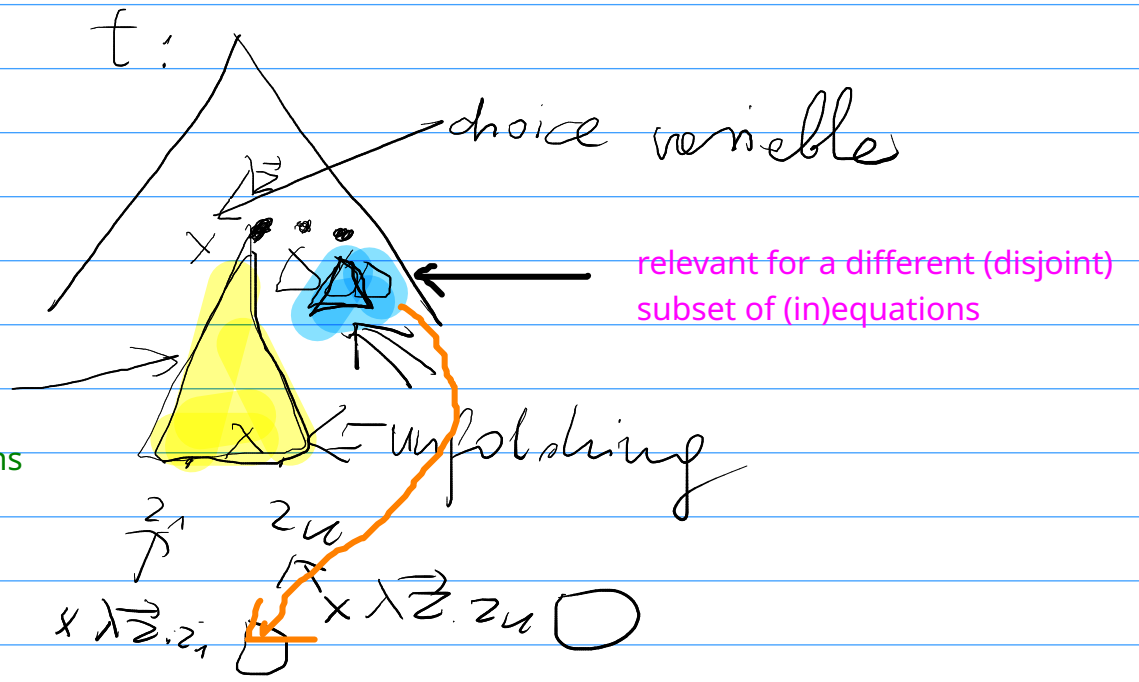
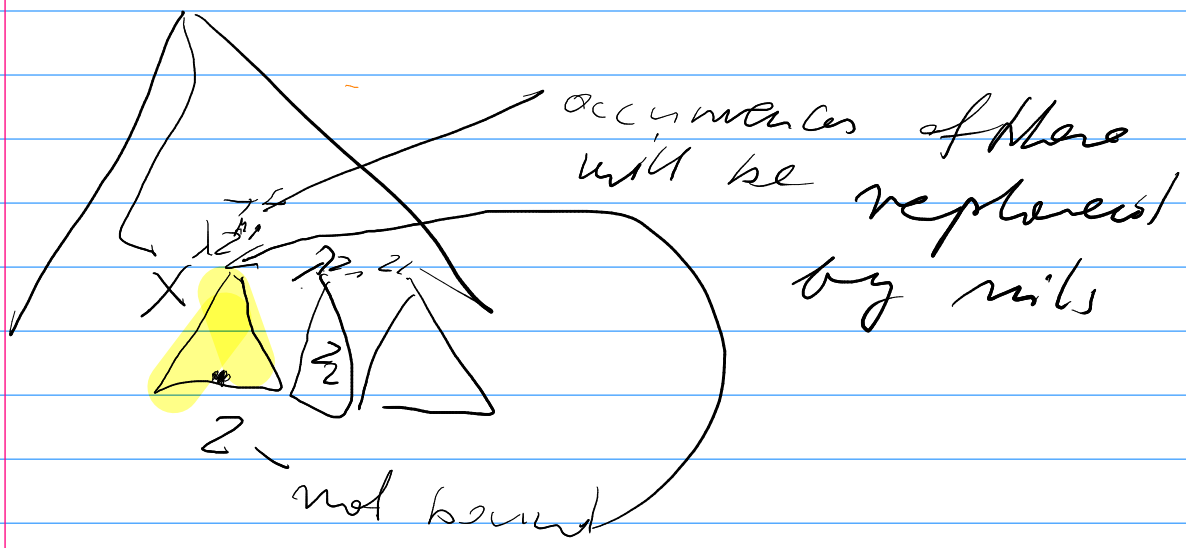
On each path in t that leads to a leaf there are only
a) main choice variables or
b) main contributing variables
c) nil variables (on leaves)
d) constants
(provided that no transformation can be applied).

Estimation on the number of occurrences:
c) at most once
d) at most depth(rhs)
b) at most depth(rhs)
a) the number of (in)equations

Suppose, we do not have the possibility to apply a transformation.

x - is an (occurrence of) variable that
* does not contribute
* is not a choice variable

Once there are no transformations possible, choice variables that are not contributing occur at most once for each (in)equation.



For a uniform variable