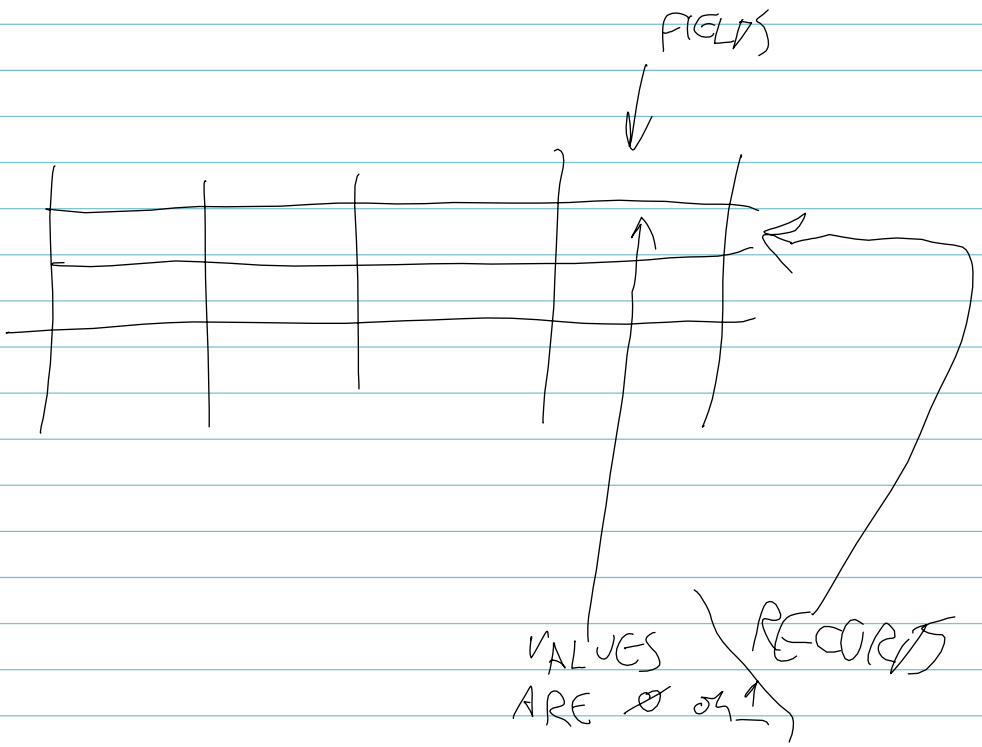
REVIEW FROM LSN 1

PROPOSITIONAL LOGIC



Interpretation:

PDF over worlds

For fact $f : p \pm \epsilon$

$\mathcal{I} \models f : p \pm \epsilon$

iff

$$p - \epsilon \leq \sum_{w \text{ s.t. } w \models f} \mathcal{I}(w) \leq p + \epsilon$$

$f \equiv a \rightarrow b$

$$p - \epsilon \leq \sum_{w \text{ s.t. } w \models \neg(a \wedge \neg b)} \mathcal{I}(w) \leq p + \epsilon$$

SET of FACTS
& PROB RULES. (KB)

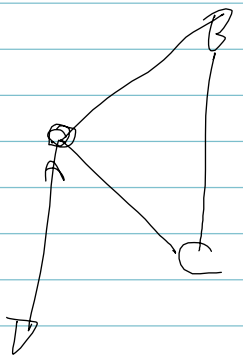
NEW FACT q -
WHAT IS PROB
OF q GIVEN
KB?

IS KB CONSISTENT?

I have 3 friends in state I, I'm in state S,

I become infected with prob.

$$1-(1-\beta)^3$$



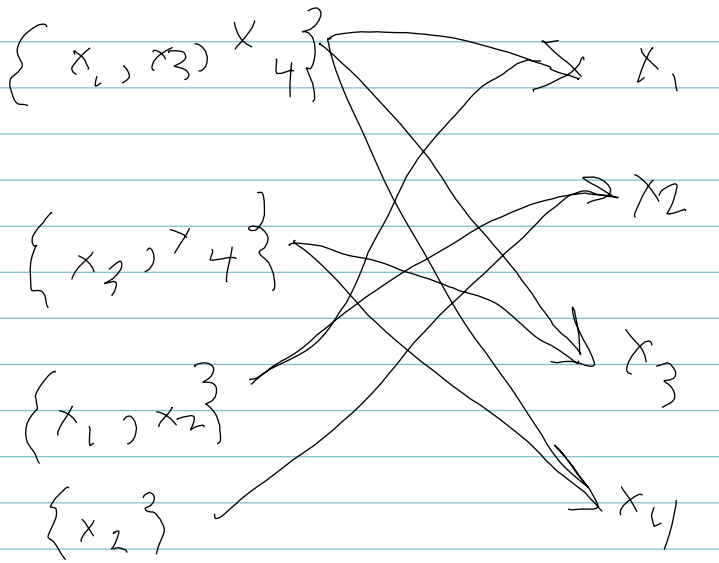
3 POSS TRIANGLES

1 EXISTS

$$cc(A) = \frac{1}{3}$$

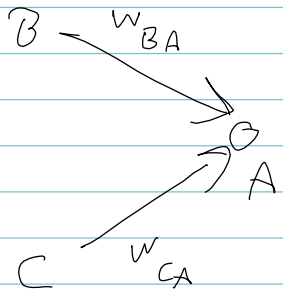
$$cc(B) = 1$$

MAX k COVER



PICK k SETS S.T.
THEIR UNION IS MAXIMIZED.

LT MODEL



IN SIM.
A GET THRESH → 0.3

~~○~~ $INF(x) = 1$ IF x IS INF
$\varnothing$ O/W

~~INF(x)~~ $\dfrac{INF(B) \cdot w_{BA} + INF(C) w_{CA}}{w_{BA} + w_{CA}} \geq 0.3$

A IS INF

JUST FINISHED ITER i.

SO, FOR EACH NODE v, I CALCULATED:

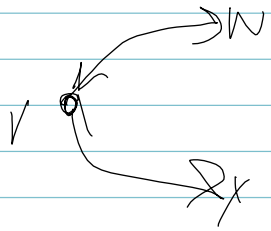
(A) ★ $\sigma(S_{i-1} \cup \{v\}) - \sigma(S_{i-1})$

Lets say we stored this value in $Ar[v]$

NOW I'm on ITER $i+1$ WHEN I GET TO v, I EVALUATE:

(B) ★ $\sigma(S_i \cup \{v\}) - \sigma(S_i)$

BUT... BEFORE I GOT TO v, I EVALD v', AND $\sigma(S_i \cup \{v'\}) - \sigma(S_i) > Ar[v]$



IF I COMPUTE $\sigma(v)$

I GET

$\sigma^{(V-\{v\})}(w)$

and

$\sigma^{(V-\{v\})}(x)$

FOR FREE