

Reminder

Homework 1 due next Friday

CS5811

September 25, 2020
Friday

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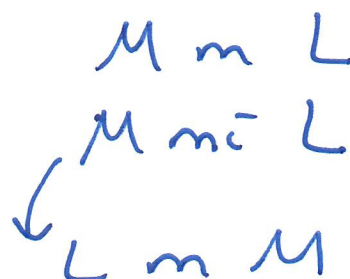
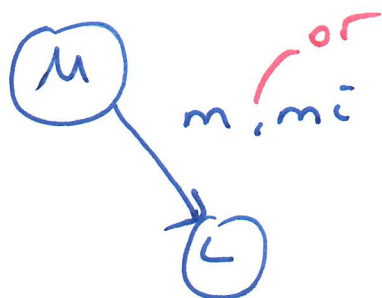
Previous class

CSP heuristics and tree structured problems

Today

Interval algebra

events are represented (no duration)

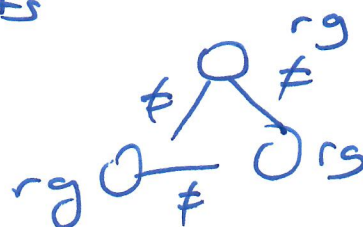


$$X \div Y = \frac{X}{Y}$$

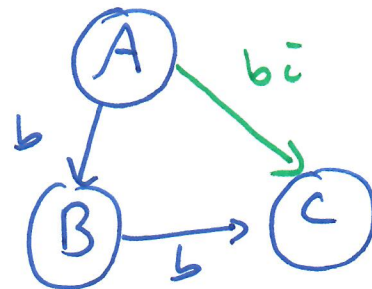
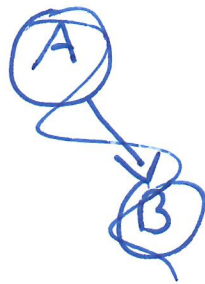
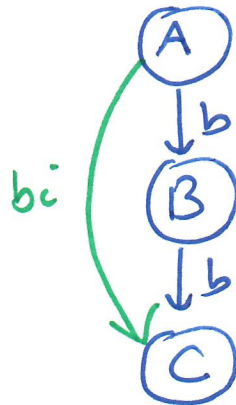
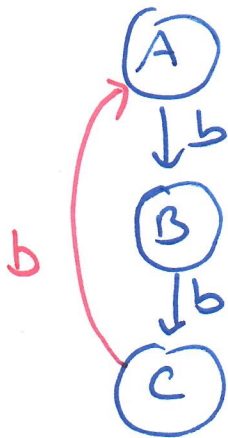
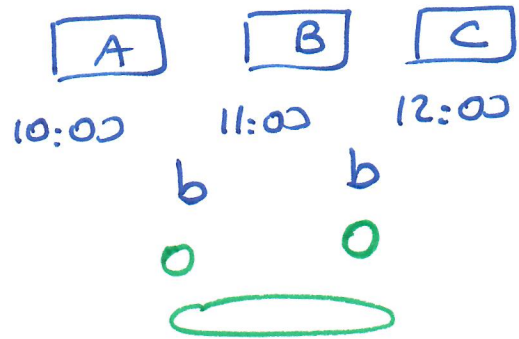
solution: problem events (not time points) quantitative constraints between events

- find a minimized graph
- assign time points (that are numeric) for events.

- no solution (graph is inconsistent)



(2)



(X)

"composition"

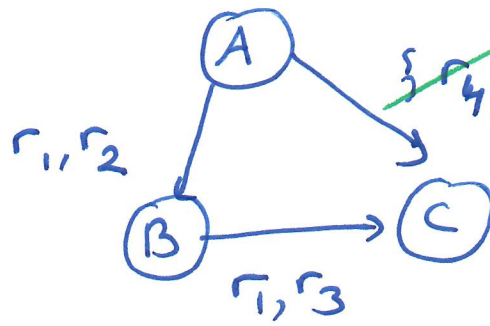
b

$\{r_1, r_2\}$

$\} \{$



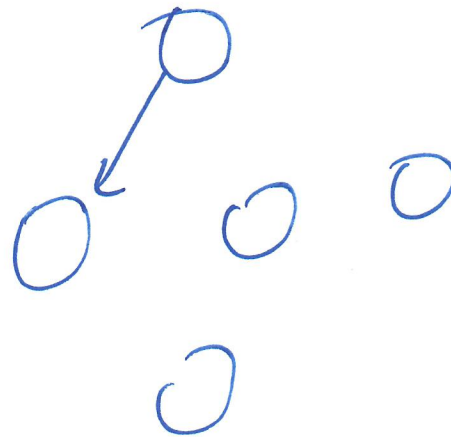
3



$\{r_4\}$
intersection

$\{r_2, r_4\}$

$\{r_2, r_4\} \cap \{r_4, r_6\}$
 $\{r_4\}$



consistency check
for every arc

N_1 N_2

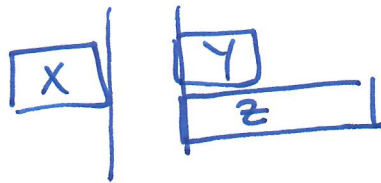
n^2

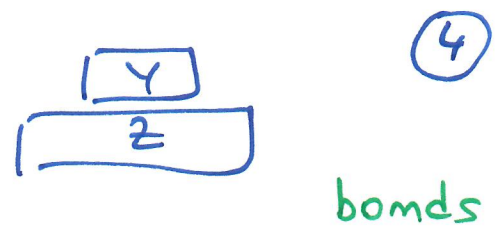
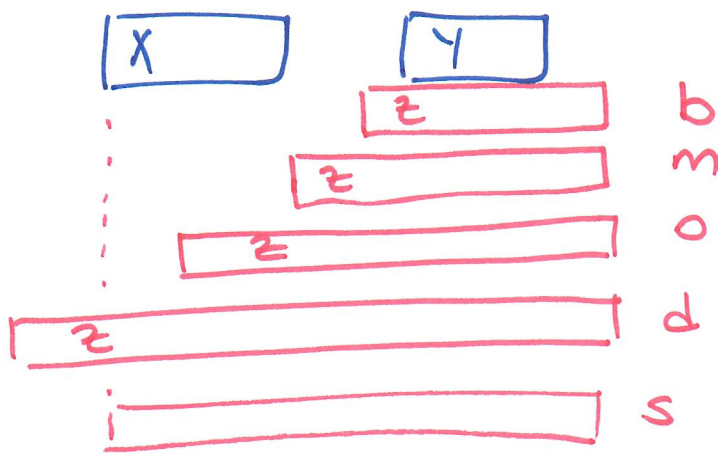
$N_1 \rightarrow N_2$

n^3

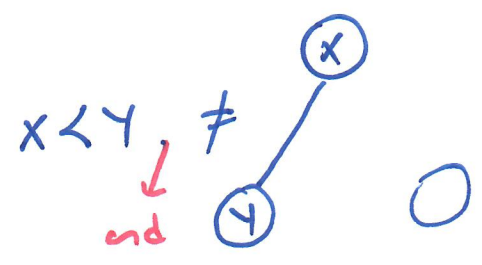
$N_1 \rightarrow N_3 \rightarrow N_2$

b d





$$\{b, m, o, d, s\} \cap \{b, b^c\} = \{b\}$$



no overlap
b or m