

# CSE881 HW7

Nan Cao, A52871775

Nov 6th, 2016

## Problem 1

(a)

$$\langle \{r\}, \{p, q\} \rangle$$

$$\langle \{p, q\}, \{r\} \rangle$$

$$\langle \{p, q\}, \{p\} \rangle$$

$$\langle \{p, q\}, \{q\} \rangle$$

$$\langle \{p\}, \{p, q\} \rangle$$

$$\langle \{q\}, \{p, q\} \rangle$$

$$\langle \{p\}, \{r\}, \{p\} \rangle$$

$$\langle \{p\}, \{r\}, \{q\} \rangle$$

$$\langle \{q\}, \{r\}, \{p\} \rangle$$

$$\langle \{q\}, \{r\}, \{q\} \rangle$$

(b)

$$\langle \{p\}, \{r\}, \{p\} \rangle$$

$$\langle \{p\}, \{r\}, \{q\} \rangle$$

$$\langle \{q\}, \{r\}, \{p\} \rangle$$

$$\langle \{q\}, \{r\}, \{q\} \rangle$$

$$\langle \{p, q\}, \{r\}, \{p\} \rangle$$

$$\langle \{p, q\}, \{r\}, \{q\} \rangle$$

$$\langle \{p\}, \{r\}, \{p, q\} \rangle$$

$$\langle \{q\}, \{r\}, \{p, q\} \rangle$$

$$\langle \{p, q\}, \{r\}, \{p, q\} \rangle$$

(c)

$$< \{p, q, r\}, \{s\} >$$

$$< \{p, r, s\}, \{s\} >$$

$$< \{p\}, \{p, q, r\} >$$

$$< \{p\}, \{p, q\}, \{s\} >$$

$$< \{p, q\}, \{s\}, \{p\} >$$

$$< \{q\}, \{r, s\}, \{s\} >$$

$$< \{q, r\}, \{s\}, \{s\} >$$

(d)

$$< \{p, q, r\}, \{s\} >$$

## Problem 2

(a)

$$w = < \{p\}\{q\}\{r\}\{s\}\{t\} >$$

Yes

$$w = < \{p\}\{p\}\{q\}\{q\} >$$

Yes

$$w = < \{p\}\{s\}\{t\} >$$

No

$$w = < \{p, r\}\{q, r\}\{q, s\} >$$

No

(b)

$$w = < \{p, q, r, s, t\} >$$

Yes

$$w = < \{q, r, s, t\}\{q, r\}\{q, s\} >$$

Yes

$$w = < \{r, s\}\{r, s\}\{r, s\} >$$

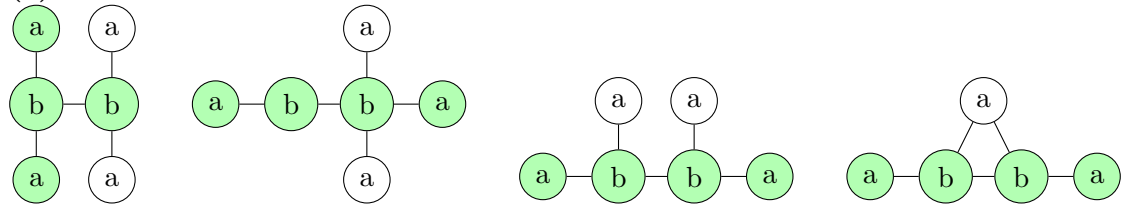
No

$$w = < \{p, q, r\}\{q, r, s\} >$$

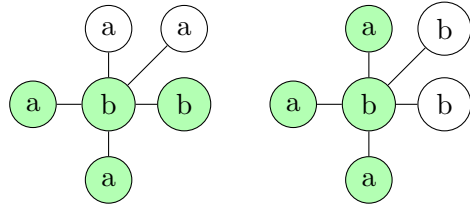
No

### Problem 3

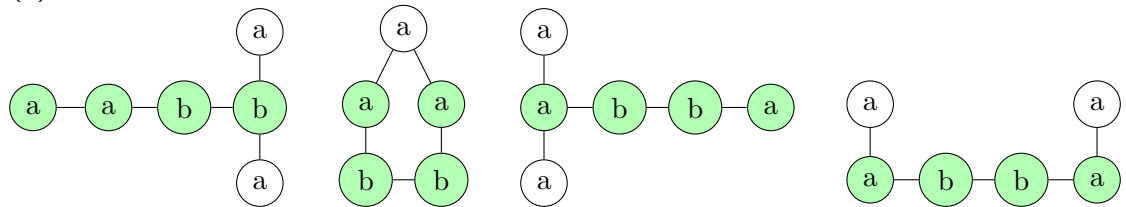
(a)



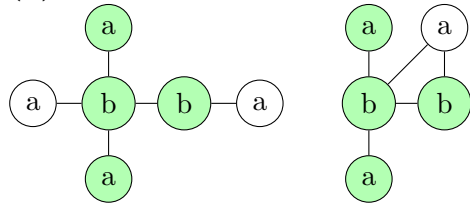
(b)



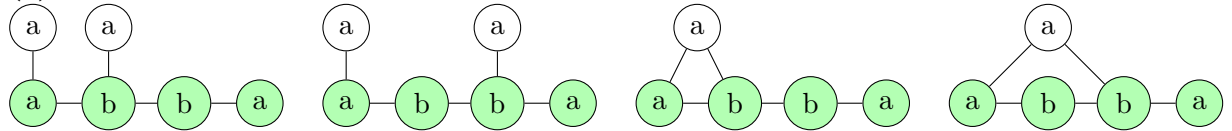
(c)



(d)



(e)



(f)

No candidates.