

CSE413

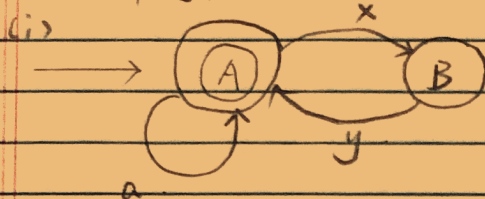
HW #7 written problem

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a.

1.  $(a|xy)^*$



(iii) all strings of 0 or more "a"s, "xy"s, in any order

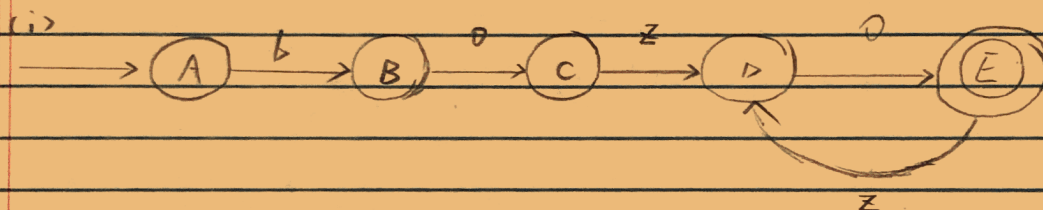
(ii)

can: a, xy

can't: ax, ay

b.

$b(oz)^+o$



(ii)

can: bozo, bozozo

can't: bozoz, bo

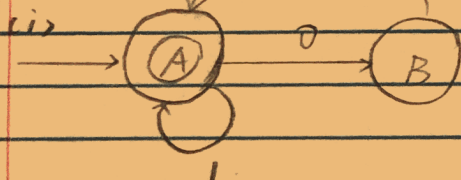
(iii) all strings that

① start with "b"

② end with "o"

③ have 1 or more "oz"s in the middle.

c.



(iii) all strings consisting of 0 or more "1"s or "01"s in any order

(ii)

can: 1, 01

can't: 0, 010

2. (a)

$b^* a b^* a b^* a (a|b)^*$

(b)

$a^* (bb)^* (a|(bb))^*$

(c) OTHER ::=  $[b-df-hj-np-tv-z]^*$

OTHER a OTHER e OTHER i OTHER o OTHER u OTHER.

3. (a) DEC ::=  $[1-9][0-9]^*$

OCT ::=  $0[0-7]^+$

HEX ::=  $0[xX][0-9A-Fa-f]^+$

$(DEC | OCT | HEX) ((L|l)?(U|u)? | ((U|u)?(L|l)?))$

