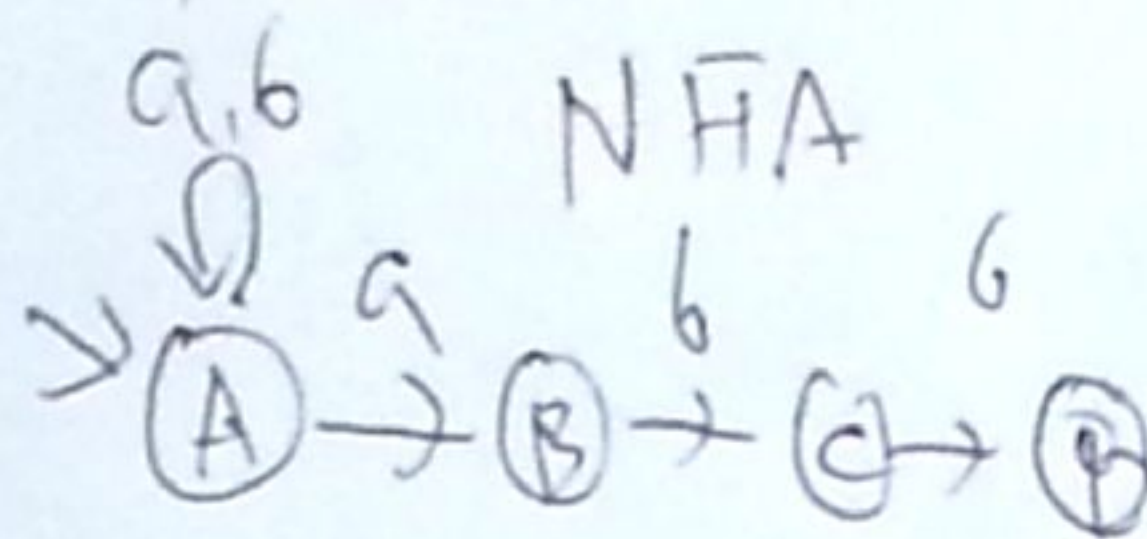
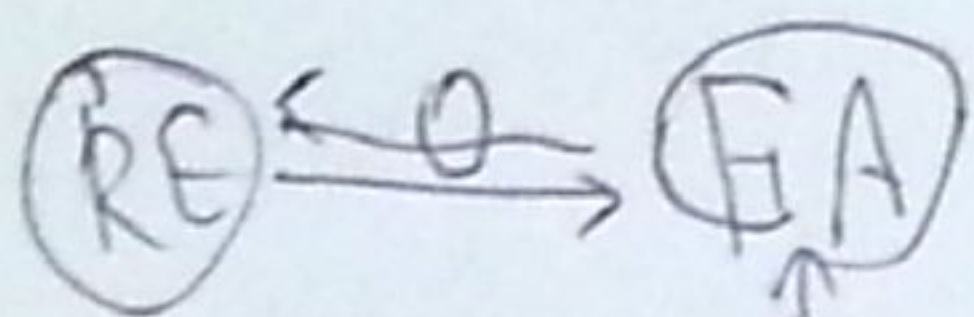


MIB 3/31 FA (or RG) to RE

r.g. 66



$(a|b)^* abb$

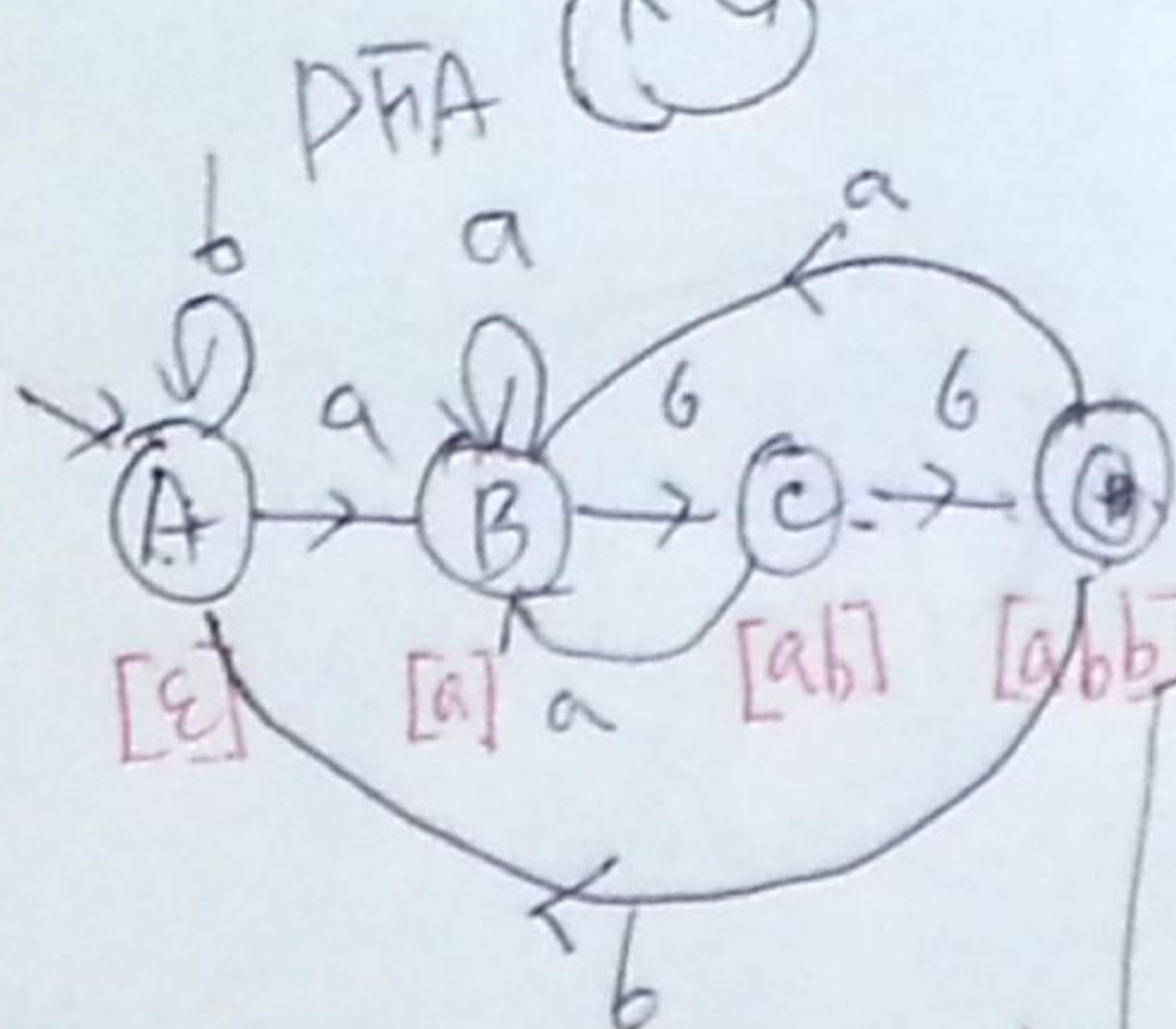
$A = (a|b)A | a$

$B = bC$

$C = bD$

$D = \epsilon$

$A = aA + bB$
 $A = a^*B$



$A = aB + bA$

$B = aB + bC = aB + b(aB + bA + bB) = aB + baB + bbaB + bbbA + bbbB$

$C = aB + bD = aB + bA + b$

$D = aB + bA + \epsilon$

* R is an equivalence relation

$a \in A, [a]_R = \{b \in A | aRb\}$
equiv. class

$B = (a + ba + bba)^* (bA + bb)$

$A = a(---)^* (bbbA + bb) + bA$
 $= (a(---)^* bbb + b)A + (---)^* bb$
 $= (---)^* (---)^* bb$

$D = A + \epsilon$
 $C = aB + bA + b = A + b$
 $B = aB + bC = aB + bA + bb = A + bb$
 $A = aB + bA = aA + abb + bA = (a + b)^* abb$
 $= (a + b)A + abb$

Problem vs algorithm
what vs how