

Aleksas Murauskas 260718389

1.20

a.  $a^*b^*$  not a member  $bbbaaab$ ,  $bcccaabb$ members:  $aaaaaaa$ ,  $bbbbbbb$ b.  $a(ba)^*b$  not a member  $aababab$ ,  $abzbabb$ member  $abababab$ ,  $ababababab$ c.  $a^* \cup b^*$  not a member  $aaaaaab$ ,  $abbbbbbb$ member  $aaaaaaa$ ,  $bbbbbbb$ e.  $\Sigma^* a \Sigma^* b \Sigma^* a \Sigma^*$  not a member none longer than 7,  $ba$ ,  $a$ member  $abababbaa$ ,  $aaaaabba$ f.  $abab \vee bab$  not a member  $abababa$ ,  $bababab$ member  $aba$   $bab$  no longer existg.  $(E \cup A)B$ not a member  $bbbbbbba$ ,  $aaaabab$ member  $b$ ,  $ab$  no longer exist

1.16 NFA