

Quiz 9 Liam Maher

Find language given reg exp

1. $a^*b(a+b)^*$

Consists of strings starting w/ 0 or more a's, followed by exactly 1 b's, then followed by any combination of a's and b's

"b", "ab", "aaab", "bba"

2. $(1+0+\epsilon)\Sigma^*$

starts w/ 1, 0, or ϵ , followed by anything in Σ^* (can end with 0, 1, ϵ)

3. $\Sigma^*a\Sigma^*b\Sigma^*$

The string must contain at least one a followed by at least 1 b, with any # of symb from Σ^* in between (basically just needs to contain a and b)

4. $\Sigma^*aaa\Sigma^*bbb\Sigma^*$

Must include the substrings aaa and bbb, with aaa coming before, can have anything before after and between them

5. $a^+(ba)^+$

Starts with one or more a's followed by one or more occurrences of the substring "ba"

aba, aaaba, ababa