Chapter 3.1 Exercises:

1/

The set of all string in L((a+b)\*b(a+ab)\*) of length less than four = {b,ab,bb,ba,aba,bba,bab}

5/

The regular expression for the set {anbm:(n+m) is even} is r=(a.a)\*(b.b)\*+((a.a)\*.a.(b.b)\*b

6b/

L2={anbm:n<4, m<3}

Regular expression of L2 is r=(𝞴+a+a.a+a.a.a)(𝞴+b+b.b+b.b.b)

9/

r=(a+b+𝞴).b.(a+ab+𝞴)

13/

The regular expression for the given language is:

r=a.a(a+b)\*.a.a+a.b(a+b)\*.a.b+b.a(a+b)\*b.a+b.b(a+b)\*b.b