Jalen Powell

February 6, 2023

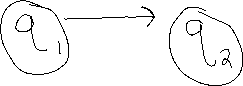
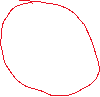
Comp 4200

Assignment 2

Text, letter

Description automatically generated

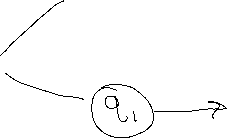
1. A = { w | length of w, |w|, is a multiple of 3 }



Text, letter

Description automatically generated

1. B = {11, 111}



Text, letter

Description automatically generated

1. C = { w | w contains an even number of 0’s and contains exactly two 1’s }



Text, letter

Description automatically generated

* To prove that regular languages are closed under the set difference operation by contradiction, we must start by stating the theorems,

1. We know that regular languages are closed under union.
2. Regular languages are closed under complementation:



1. Regular languages are closed under intersection.

