

## COMP170: Recitation 5

### Problem 1

Let  $C_n = \{x \mid x \text{ is a binary number that is a multiple of } n\}$

Show that  $C_n$  is regular for any  $n$ .

for 4



We can do the same thing  
for any  $n$ ...

### Problem 2

The following language is the intersection of two simpler languages. Construct FSAs for the simpler languages and then use these FSAs to construct an FSA for their intersection.

$L = \{w \mid w \text{ has an odd number of 0's and at least two 1's}\}$

