

## CMSC330 Fall 2010 Quiz #2

Name \_\_\_\_\_

Discussion Time (circle one):      9am   10am   11am   12pm   1pm   2pm

### Instructions

- Do not start this test until you are told to do so!
- You have 15 minutes for this quiz.
- This is a closed book exam. No notes or other aids are allowed.
- Answer essay questions concisely in 2-3 sentences. Longer answers are not needed.
- For partial credit, show all of your work and clearly indicate your answers.
- Write neatly. Credit cannot be given for illegible answers.

1. (2 pts) What is the output (if any) of the following Ruby program? Write FAIL if code does not execute. Recall that `Array.collect` applies a code block to each element of an array, and creates a new array from the value returned by the code block.

```
a = [1,2,3]
b = a.collect { |x| "#{x-1}!" }
puts b
```

# Output =

2. (6 pts) Consider the regular expression `ab*`. Recall `*` has higher precedence than concatenation.
- a. (1 pt) Does it accept the string "a"? Circle one:      **Yes**   **No**
- b. (5 pts) Create a NFA for `ab*`, using the algorithm discussed in class.

