

CMSC330 Fall 2010 Quiz #1

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. (4 pts) Name an important difference between Ruby's *nil* and Java's *null*.

2. (12 pts) What is the output (if any) of the following Ruby programs? Write FAIL if code does not execute.
 - a. (4 pts)

```
a = { }  
a["foo"] = 1  
puts a[1]
```

Output =

 - b. (4 pts)

```
if "Run DMC" =~ /[a-z]+/ then  
  puts "Found #{$1}"  
else  
  puts "Not found"  
end
```

Output =

 - c. (4 pts)

```
a = [1,2,3]  
b = a.collect { |x| x+2 }  
puts b
```

Output =

3. (4 pts) Give a regular expression (formal REs or in Ruby) for all even 3-digit numbers less than 200. Leading zeros are allowed (i.e., allow 000 to 198, but not 001 or 199).