# cs0401 Sum '12

### **Announcements**

<u>Syllabus</u>

Daily Outline

Install Java **Windows** 

Install Java Max OSX

HANDIN

CheatingPolicy.

HandinPolicy.pd

**TUTORING** 

## **Program #6. The Fraction class**

- <u>Program6.java</u> Tester Program. DO NOT MODIFY
   <u>Fraction.java</u> Starter File. You must fill in the methods

Download and compile both of these java files. Then execute Program6.

Notice they compile and Program6 runs, but the output of Program6 is a lot of nulls because the methods in the Fraction.java class have been filled in with placeholder statements that just return null values or zeros etc. You must fill in those methods with correct code that produces the correct output for whatever operation is being represented.

You only hand in one file: Fraction.java after you have filled in the missing code and thoroughly tested it.
Do not modify Program6.java. I will use that file to test your Fraction.java file.

SCROLL DOWN PAST THE OUTPUT FOR THE GRADING RUBRIK

```
Command Prompt
C:\Documents and Settings\hoffmant\Desktop>java Program6
f1=22/7
f2=4/3
f3=6/1
22/7 divided by 4/3 == 66/28

22/7 multiplied by 4/3 == 88/21

4/3 plus 6/1 == 22/3

6/1 plus 4/3 == 22/3

6/1 minus 4/3 == 14/3

f1=22/7
 f4=0/1
f6=123/21
f6 realValue =5.8571
after reduction: f6=41/7
after reduction: f6 realValue =5.8571
 C:\Documents and Settings\hoffmant\Desktop>_
```

### **GRADING RUBRIK**

- CORRECTNESS IS ONLY WORTH 75%
- STYLE IS WORTH 25%

METHOD	STYLE REQUIREMENT	STY	LE HINT
public Fraction( )	1 statement caling full C'Tor	1	
public Fraction(int n)	1 statement caling full C'Tor	1	
Fraction( int n, int d )	2 statements calling setters	1	
public Fraction (Fraction other)	1 return statement	2	
public Fraction dividedBy( Fraction other )	1 return statement	4	write/use private reciprocal() method
public Fraction multipliedBy( Fraction other )	1 return statement	4	
public Fraction plus( Fraction other )	1 return statement	6	
public Fraction minus( Fraction other )	1 return statement	6	
		25	