GAAAAHH!

My eyeballs are seared and my calculator finger is bruised and raw!

So... bad omen.

Calculus quizzes are the worst.
• Office hours: on Sunday afternoon, by appointment (email by 6pm, Saturday)
• Lab W/Th optional
• After midterm: Introducing project 1
• Problems: Similar to the following slides. Will try to emphasize problems seen in labs.
• Example problem #2
Complete the following printTriangle(...) method to print a triangular pattern. For example, printTriangle(5) will print the triangle shown as below. Notice: System.out.print(...) allows you to print without changing to a new line while System.out.println(...) changes to a new line after printing.

```
1 2 3 4 5
1 2 3 4
1 2 3
1 2
1
```

```java
public void printTriangle(int n) {
}
```
// how many lines you want
for (int lines = n; lines > 0; lines-- )
{
    // how many numbers per line?
    for (int numbers = 1; numbers <= lines; numbers++)
    {
        System.out.print(numbers + " ");
    }
    System.out.println();
}
Suppose you have access to a `SimpleCircle`, which has a constructor which draws the circle at 10,10 and takes no parameters, and has the methods

```java
moveHorizontal(int distance) and moveVertical(int distance), both of which erase, draw, and wait a small amount of time. Write the following method, in a different class, that draws a simple circle and smoothly moves it on a diagonal from 10,10 to 100,100.
```

```java
void runAnimation(){
}
```
The following code segment is from a Java program that does some mysterious calculation. When we run this code segment, what will it print?

```java
int n = 5;
int result = 1;
while( n > 0 )
{
    result = result * n;
    n = n-1;
}
System.out.println("result : "+result);
```
You must finish writing a method which determines how many light sensors on the scribbler are covered. You have already tuned the light threshold values and now have three `booleans`, each of which is true if and only if the light sensor is covered. Use a return value to say how many holes are covered.

```java
int getNumCovered(boolean rightIsCovered, boolean centerIsCovered, boolean leftIsCovered)
{
    //assume values for booleans have been set correctly

    //TODO: perform calculation and pass back
    //the number of sensors covered

    return 0;  // Placeholder return value
}
```
• More practice problems
  – Chapter 3: 1
  – Chapter 4: 1, 4