Announcements

• Project #1 (Orioles Baseball) due Sunday
Computers are Fast!

FastArithmetic.java
Stopping an Infinite Loop!

Eclipse Demo...
Nested Loops

Examples:
- GuessingGame.java
- Rectangle.java
- Stripes.java
User enters a size. For size 5, print:

X0000
XX000
XXX00
XXXX0
XXXXX0
XXXXX

1. Using a “formula” to compute number of O’s on current row
2. Maintaining a variable for number of O’s on current row
3. Using a comparison to decide whether to print X or O
Increment Operator

• Some expressions carry a “value”
• Some expressions have “side effect(s)”

• These three expressions have the same side effect:
  \[ x = x + 1 \]
  \[ x++ \]
  \[ +++x \]

• \( x++ \) and \( ++x \) carry different values.
Self-Test

```c
int a = 7;
int b = a++ + 4;
int c = ++a - 3;
```

After this code runs, what are the values of `a`, `b`, and `c`?
Decrement Operator

• These three expressions have the same side effect:
  \[ x = x - 1 \]
  \[ x-- \]
  \[ --x \]

• \[ x-- \] and \[ --x \] carry different values.