Continue writing static methods

Examples:

• public static void printChars(int n, char c) // print n copies of c

Let’s use the previous one to make these:

• public static void printRectangle(int width, int height, char c)

• public static void printTriangle(int size, char c)
Short Circuiting

int x = 7, y = 10;

Now consider these two code fragments:

if (x > 4 || y++ < 3) {
    <do something>
}

if (x < 2 && y++ == 15) {
    <do something>
}

• Where might this be useful?
Type Casting with Primitives

double       WIDEST
float
long
int
short
byte       NARROWEST

• Examples of implicit casting
• Examples where Java won’t do implicit casting
• Explicit casting:
  
  int x = (int)3.9;
Details about Casting...

double x = 58.7;
int y = (int)x;
What value is stored in y? Has x changed?

Does this work?
int x = 3
int y = 4
double z = x / y;

How can we fix it with casting?
Self Test

Which of the following are OK, and which are errors?

```java
long x = 3.5;
float x = 3;
float x = 3.7;
float x = 3.7F;
double h = 3.5F;
long x = 3;
int x = 3737373737373737373737373737373737373737373737373737373737373L;
long x = 3737373737373737373737373737373737373737373737373737373737373L;
byte x = 12;
byte x = 155;
```
Intro to Object Oriented Programming

What is an object?

Examples (What kind of objects might there be)?

• Simple chess game that people play online
• Software to monitor banking transactions
• Simulation of the University of MD
• Project #2
State and Behaviors

• What is state?
• What are behaviors?

• Examples (What might comprise state and behaviors)?
  • BankAccount
  • Student
  • MyGrid
  • String
  • Scanner