Scary Halloween

# **Mid-Term 2 Review!**



#### **Outline**

> Mid-Term 2 Review

➤ Intro to Java

### Mid-Term 2

# Topics covered:

- Program design for atomic data through lists (as in Mid-Term 1)
- Trees and mutually recursive data structures
- $\bullet$  local, functions as values, and lambda
- Abstraction for functions and contracts
- Generative recursion and accumulators
- State and assignment

## **Mid-Term Style**

- In-class, open-book, open-notes, closed-computer
- Fill-in-the-blank
  - $\circ$  You'll receive a medium-sized program with gaps
  - Gaps can appear anywhere: data definition, contract, purpose, examples, implementation
- Examples to appear on the web page
  - Small example in class today
  - Another example with and without solution

### **Outline**

- ➤ Mid-Term 2 Review
- > Intro to Java

#### Java

Java is a programming language that was invented in the 90s

It's probably the most popular programming language right now

- Syntax looks like C/C++
- Semantics more like Lisp/Scheme/Smalltalk

CS 2020 uses Java

CS 3500 uses C++

### Java in CS 2010 F03

Recent semesters of CS 2010 included a quick tour of Java during the last week of class

For a variety of reasons (especially the switch to MWF lectures) we've arrived at Java sooner

Furthermore, we'll

- approach Java in a different way than previous semesters
- continue to use DrScheme, in an experimental Java mode
- use an early draft of a HtDP-to-Java textbook



or

