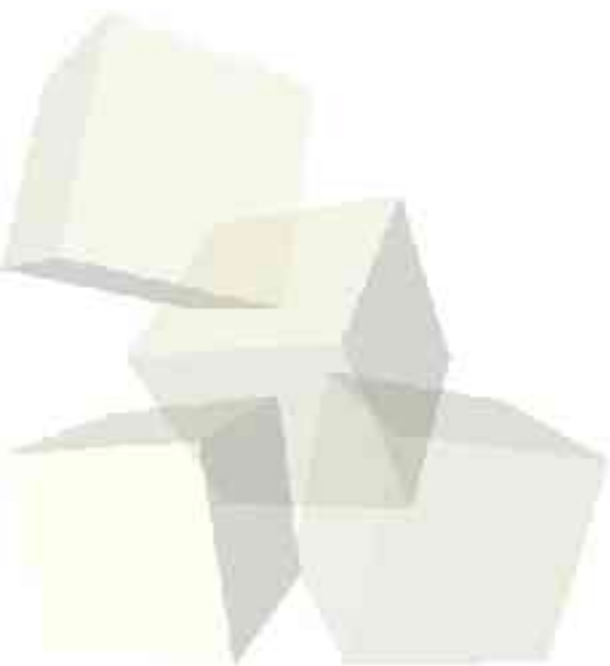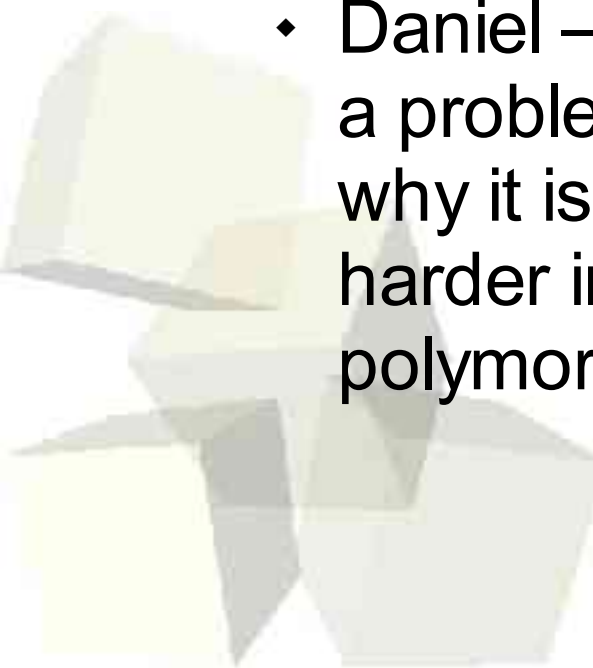# Basics of Subprograms

10-7-2004
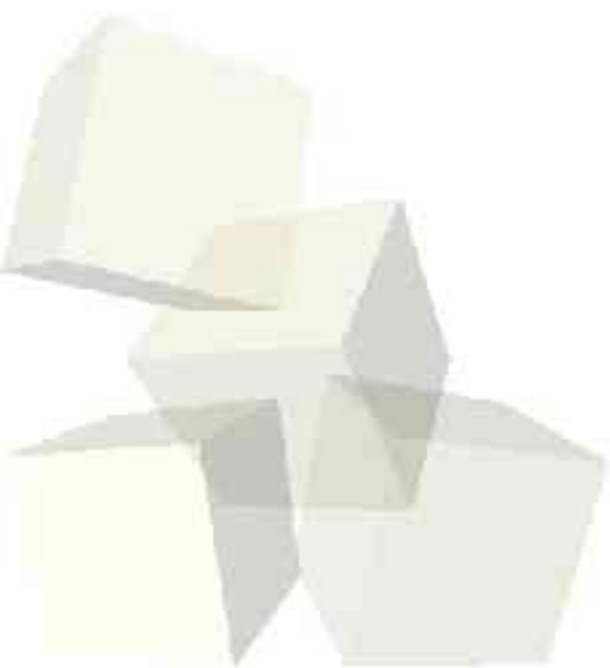
Opening Discussion

- Let's do the last three sheets of questions from last class.
- All the project ideas look good.
  - Tom – whether you go into C# will depend on how much material you can get in the Java parts.
  - Daniel – while reading yours I realized how difficult a problem it is. Your analysis might simply show why it isn't being done. I would note that it is even harder in languages with significant polymorphism.

Discussion Questions

- Let's go over your discussion questions for today.

Significant Concepts

- Basics
- Design issues
- Local referencing environment
- Parameter-passing methods
  - Pass-by-value
  - Pass-by-result
  - Pass-by-value-result
  - Pass-by-reference
  - Pass-by-name
  - Type-checking
  - Implementations
  - Multi-dimensional arrays