QUIZ!

Use a full sheet of 8½x11" paper. (Half sheet? Half credit!)

Put **only your last name** in the **far upper left hand corner** of the sheet, where a staple would hit it. It's OK to write BIG, just start in the corner!

Mitchell | **AVOID A ½-POINT DEDUCTION!**

Keep answers short! Avoid full sentences. Feel free to abbreviate.

6 questions; 3 minutes; 3 points.

Numbering responses may help you avoid overlooking a question. You may go ahead and number your paper.

1. Write a <u>Java</u> expression that has a side effect.

2. Write a Haskell function that computes the area of a rectangle given its width and height. Append `::Int` to force it to operate on `Int`s.

3. What's the type of the function you wrote in the previous problem?

4. What does REPL stand for? Or, what's the essential functionality provided by a REPL?

5. What's a characteristic of the functional programming paradigm?

6. Imagine that `:type f` shows this: `Foo a => a -> Char` What does that type mean?

Solutions

1. *Write a <u>Java</u> expression that has a side effect.* **x++**

2. *Write a Haskell function that computes the area of a rectangle given its width and height. Append* **::Int** *to force it to operate on **Int**s.* **area w h = w * h :: Int**

3. *What's the type of the function you wrote in the previous problem?*
   Int -> Int -> Int

4. *What does REPL stand for? Or, what's the essential functionality provided by a REPL?* Read-Eval-Print Loop

5. *What's a characteristic of the functional programming paradigm?* See slides 24-25. My quick answer: "functions are values"

6. *Imagine that* **:type f** *shows this:* **Foo a => a -> Char** *What does that type mean?*
   f is a function that requires a value whose type is a member of the type class **Foo**. **f** produces a **Char**.