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!

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

3 questions; 4 minutes; 2 + 1½ + ½ points. Plus a ½-point EC.
(First question is 2 points; 2nd is 1½ points.)

Numbering responses may help you avoid overlooking a question. You may go ahead and number your paper.
1. In English, describe strings that are matched by this Ruby regular expression: `/^\[xyz\]+[abc]?\d{2,3}$/`

2. Write a definition for a Ruby class named `X`. Instances of `X` are created by specifying a string, like `X.new("abc")`. `X` has one method, named `f`, that returns the length of the string that the instance was created with.

3. The line "`attr_reader :x`" in a class definition specifies that there should be a getter for the instance variable `x`. What's especially interesting about `attr_reader`?

EC ½ point: Briefly, what's the difference between a language being extensible vs. being mutable?
Solutions

1. Describe strings matched by /\^[xyz]+[abc]?\d{2,3}/
   Starts with one or more occurrences of \texttt{x}, \texttt{y}, or \texttt{z}; followed by an optional \texttt{a}, \texttt{b}, or \texttt{c}; followed by two or three digits.

2. Write a definition for a Ruby class named \texttt{x}.
   ```ruby
   class X
     def initialize s
       @f = s.size
     end
     attr_reader :f
   end
   ```

3. The line "\texttt{attr_reader :x}" in a class definition specifies that there should be a getter for the instance variable \texttt{x}. What's especially interesting about \texttt{attr_reader}?
   \texttt{attr_reader} is a method that generates a getter method.

\textit{EC} ½ point: If a language is mutable, the meanings of operations can be changed, where extensibility only allows for providing meaning for previously undefined operations.