$X/\sim$ 

The quiz on Friday will consist of definitions, and will be brief. Your wording on a definition must be precise, and you will be required to give a symbolic form and a verbal interpretation of the symbols. (Recall that an interpretation is a conceptual translation, not a symbol-by-symbol transliteration.) You may be asked to produce examples or verify that something satisfies the requirements of a definition. The ideas you should know include:

```
f: X \to Y
f^{-1}: Y \to X
f \circ g
f is one-to-one
f is onto
f is a bijection
f = g
\mathrm{id}_X
f(A)
f^{-1}(B)
R is a relation on X
R is reflexive
R is symmetric
R is transitive
\equiv is an equivalence relation on X
[a]
```