Exam results

- Scoring algorithm:

$$60 + \sum_{j=1}^{5} n_j - \min\{n_j : 1 \leq j \leq 5\} + n_6,$$

$$\text{where} \quad n_j \in \mathbb{Z} \cap [0, 10] \quad \text{when} \quad 1 \leq j \leq 6.$$

- Class statistics: maximum 106; minimum 66; average 85.

The concept of homeomorphism rephrased

From last time, $f : X_1 \to X_2$ is *continuous* when, for every set U that is open in X_2, the inverse image set $f^{-1}(U)$ is open in X_1.

Consequently, $f : X_1 \to X_2$ is a *homeomorphism* if and only if

1. f is a bijection, and
2. f is continuous, and
3. f^{-1} is continuous.

Assignment due next class

- Write a solution to number 2 or 3 in Exercises 5.1.