

COMP 210, Spring 2001, Homework 9
Due Wednesday, April 4 at the start of class

Before you start the homework, you should remind yourself of our General Advice, Advice on Homeworks, and Grading Guidelines. All are available from the class web site (<http://www.owl.net.rice.edu/~comp210>).

Start Early!

Missionaries and Cannibals: (20 points)

Read Section 32.2 of the text and work exercises 32.2.1 through 32.2.8

You are encouraged to use Scheme's library functions, such as **append**, **filter**, **foldl**, **foldr**, **map**, **ormap**, and **andmap**. This should make your task simpler.

Work systematically on one piece of the problem at a time. It is imperative that you thoroughly test each piece before proceeding to the next one.

Do not wait until the last few days before the program is due. You will solve this problem in far less time if you work methodically well ahead of the deadline.

Grading: If you do not get the program to work, state this fact clearly, in writing, at the top of your solution. Turn in your complete work for each of the functions that you finished. Be sure to show your data definition, contract, purpose, header, program examples, template, function definition, and test cases. [For generative recursion, include a termination argument.] We will give up to half credit for partial solutions, if they demonstrate a systematic effort for each sub-problem.