

COMP 210, Spring 2002, Homework 9
Due Wednesday, April 10 2002 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**, and **map**. This should make your task simpler.

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.

Suggestion: Start early. Solve one problem each day. You will finish early that way. Remember, this homework is worth roughly ten percent of your total grade. This is the same amount as the first exam, and one-half of the points on each of the other exams!