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.