Phase	Goal	Activity
Contract Header & Purpose	to name the program, to specify its inputs & outputs, to describe its purpose, to formulate a program header	choose a *name* that fits the problem • study the problem for clues on how many numbers the function consumes • pick one variable per input; if possible, use names that are mentioned for unknown "givens" in the problem statement • describe what the function should produce using the chosen variables names • formulate the contract & header: ;; *name* : *number* ... $\rightarrow$ *number* ;; **Purpose**: to compute ... *x1* ... (**define** (*name x1* ...) ...)
Examples	to characterize the input- output relationship via examples	search the problem for examples • add examples to function (input(s), output) • validate the examples using the problem statement, if possible
Body	to define the program	formulate how the function computes its results • develop a Scheme expression that uses Scheme's primitive operations, other functions, and the variables • translate the mathematical expressions in the problem statement, if possible
Test	to expose mistakes ("typos" and logic)	apply the function to the inputs of the examples • check that the outputs are as predicted above