Exercise 9
Best First on Rewrite System

The Best First algorithm in the previous exercise should be directly applicable to a new set of rules.

Formulate the following rewrite system into a set of Clips rules which can be directly substituted for the water jug rules in the heuristic clips search program.

- $R1 : C \longrightarrow (D, L)$
- $R2 : C \longrightarrow (B, M)$
- $R3 : B \longrightarrow (M, M)$
- $R4 : Z \longrightarrow (B, B, M)$

The following should be given in ONE file (in this order):

- A set of comments on the general structure of the program and rules
- The data structure
- The heuristic function
- The initialization function
- The set of rules as clips rules
- The goal recognition routine
- The rest of the previous clips program

Modify the heuristic function so as to allow only **n** solutions. This can be done by introducing a fact

(number-of-solutions ?)

All data structures and rules should be adaquately documented. The file sent should be runable. The best first algorithm part should be exactly that of the water jug problem. In comments, note any changes that were made