Angel Hernandez

Project 3

Code:

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| numeral(0).  numeral(succ(X)) :- numeral(X).  equal(N,N).  greater\_than(succ(\_),0).  greater\_than(succ(X),succ(Y)) :- greater\_than(X,Y).  less\_than(0,succ(\_)).  less\_than(succ(X),succ(Y)) :- less\_than(X,Y).  add(0,N,N).  add(succ(X),N,succ(Z)) :- add(X,N,Z).  subtract(N,0,N).  subtract(succ(X),succ(Y),Z) :- subtract(X,Y,Z).  multiply(0, \_, 0).  multiply(succ(X), Y, Z) :- add(Y, K, Z), multiply(Y, X, K). |

Test Case:

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| 1 ?- equal(succ(0),succ(0)).  true.  2 ?- greater\_than(succ(succ(succ(0))),succ(0)).  true  3 ?- less\_than(succ(0),succ(succ(0))).  true.  4 ?- add(0,succ(succ(0)),R).  R = succ(succ(0)).  5 ?- subtract(succ(succ(0)),succ(0),R).  R = succ(0)  6 ?- multiply(succ(0),succ(succ(0)),R).  R = succ(succ(0)) |