begin\_problem(monoide).

list\_of\_descriptions.

name({\*\*}).

author({\*\*}).

status(unsatisfiable).

description({\*\*}).

end\_of\_list.

list\_of\_symbols.

functions[(b,0), (P,2)].

%% b: unità

%% P: prodotto

end\_of\_list.

list\_of\_formulae(axioms).

%% assiomi di monoide

formula(forall([x],equal(P(x,b),x))).

formula(forall([x],equal(P(b,x),x))).

formula(forall([x],forall ([y],forall([z],equal(P(P(x,y),z),P(x,P(y,z))))))).

end\_of\_list.

list\_of\_formulae(conjectures).

formula(forall([x],implies(exists([y],equal(P(y,x),b) ),forall([u],forall([v],implies(equal(P(x,u),P(x,v)),equal(u,v))))))).

end\_of\_list.

end\_problem.