

Name: _____

ID#: _____

Question 1:

Explain what is wrong with the Prolog statement $K \text{ is } K+1$?

(3 points)

Question 2:

What is the relation between **resolution** and **unification** in Prolog?

(4 points)

Question 3:

Consider the following Prolog predicates:

(4 points)

`aux([],L,L).`

`aux([H|L1],L2,[H|L3]) :- aux(L1,L2, L3).`

`guess([], []).`

`guess([X|Y], Ans) :- guess(Y,Z), aux(Z, [X], Ans).`

- a) What does the predicate **guess** do?

- b) Show the result of the following Prolog goal
?- guess([1,7,9,6], Ans).

Question 4:

Write a Prolog functor **last** that returns the last element of a given list.

(4 points)