LIVE ASSIGNMENTS

Live assignment 1 [Cake]

Once again, several dirty coffee cups were left in the kitchen of the student council over the weekend. Since the student council has decided that anyone who leaves their coffee cup unwashed in the kitchen must bring a cake, there are heated discussions about who is to blame. After some time, the following is agreed upon:

(1) Dirty coffee cups were left behind by at least one and at most three people. Only the usual suspects, Mickey, Goofy, and Pluto, are possible culprits for the mess.

(2) Whenever Pluto leaves his dirty cup behind, Goofy also leaves his dirty cup behind.

(3) Since Mickey doesn't know how to make coffee, he only left his dirty cup behind when Goofy or Pluto did the same.

a) Model this situation using propositional logic. First, specify the propositional variables used and their intended meanings. Then, set up propositional formulas that describe the situation.

b) Is Goofy guilty? How can this be justified using the formulas from part a) of the exercise?

Live assignment 2 [Multiple Choice]

Which of the following answers are correct?

(a) All of the following answers

(b) None of the following answers

(c) All of the previous answers

(d) Exactly one of the previous answers

(e) None of the previous answers

(f) None of the previous answers