## 1. Question 1

- a. The variables in this problem are the size of the chess board, and potentially the number of knights desired. I think it is arguable whether to include K the number of knights as a variable.
- b. N can be any positive integer greater than zero, but K will always be strictly less than n^2 (Because there will be fewer knights than the number of squares)
- c. Unlike the n-queens problem, it is possible to fit more knights in one column than queens as they will be unable to attack each other.
- d. The set of variables is constrained by the physical and hardware limitations of whoever is performing the calculation
  - The number of knights is limited by the size of the board  $(n \times n)$

## 2. Question 2

In a constraint satisfaction problem, constraining the parameters by the most important variable gives the most freedom of flexibility, because everything is decided by that variable. As an example: the N-Queens problem is constrained by the size of the board and that is only one value that determines almost everything about the program itself.