

Roll-1705045

Chapter-1 ; Section-2

To be verified by 1705075

Question:-

31.

It is related to inhabitants of an island on which there are three kinds of people. Knights who always tell the truth, Knaves who always lie, and spies (called Normals by Smullyan [sm78]) who can either lie or tell the truth. You encounter three people, A, B, C. You know one of these people are knight, one is knave, and one is a spy. Each of the three people knows the type of person each of others two is. For each of situations, if possible, determine whether there is a unique solution and determine who is the knave, knight and spy

are. When there is ~~a~~ no unique solution, list all possible solutions or state that there are no solutions.

A says "I am not the spy." B says, "I am not the spy." C says, "I am not the spy."

Answer: —

There is no solution. Either A or B or C has to be a knave. A knave always lies. But here all of them say ~~the~~ "I am not the spy." A knave can never say "I am not the spy."

So, it has no solution.