ICA (In-Class Assignment) 1

January 5th

Names: ____________________________

Decide as a group on your answer, and justify it by explaining your reasoning.

You are a wandering scholar whose travels bring you to the mysterious Land of Logicalia where every inhabitant is (exactly) one of two types: either a Knight who always tells the truth or a Knave who always lies. Demonstrate that you can survive the following adventures using only your wits. Remember that your life may depend on your well-justified decisions.

1. You are approached by two fair (and armed) maidens who will escort you safely through the Black Forest provided you know whether either Guinevere or Morgana (or both) is telling the truth. Morgana says: Both of us are Knaves.

   Can you claim safe passage?

2. Percival and Quentin are both challenging you to a duel, but you are only obligated to accept challenges from a Knight. Percival says: Either I am a Knave or Quentin is a Knight.

   Which challenge(s) if any do you have to accept?

3. You are about to be poisoned by three wizened witches (Igraine, Ragnell, and Nimue) unless you can determine the type of the leader Nimue. Ragnell says: Igraine is a Knave.

   Igraine says: Ragnell and Nimue are of the same type.

   Do you have to drink the cup of doom?