1. There is a line of 5 lakes, over which a flock of geese flies. At each lake, half the flock plus half a goose land on the water. If all the birds landed on the 5 lakes, how many birds were there?

2. There was a royal ball, to which 11 ladies and two gentlemen showed up late. The drawbridge was up, and they only had one boat with which to cross the moat. The boat could only carry two gentlemen or one lady at a time. How did they manage to get everyone to the castle?

3. 11 boys and 11 girls are sitting at a round table. Prove that someone must be sitting in between two boys.

4. A woman bought 7 drums and 7 pairs of drumsticks for her 7 children. All the items were of different sizes. If one child sees that his drum and his drumsticks are bigger than another child’s, he starts playing. Otherwise, he will not play. Find a) the smallest, and b) the largest number of children that will start playing when they get their presents.

5. There is a river with a lot of branching streams that intersects a highway under several bridges. Is it true that there must be two bridges that are neighbors along the river and along the highway? Bridges are called neighbors if there are no bridges anywhere in between them along the river or the highway.