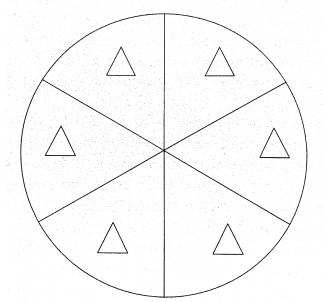


Problems: 11/8/2020

1. A circle is divided into 6 sectors, and a pawn stand in each of them. It is allowed to shift any two pawns to sectors bordering those they stand on at the moment. Is it possible to gather all pawns in one sector using such operations?



2. Princess Alexa has two magic swords. One of these can cut off 21 heads of an evil Deagon. Another sword can cut off 4 heads, but after that the Dragon grows 1985 new heads. Can Alexa cut off all the heads of the Dragon, if there were 100 of them to begin with?

3. There are 7 glasses on a table, all standing upside down. It is allowed to turn over any 4 of them in one move. Is it possible to reach a situation where all the glasses stand right side up?