1. Three friends - sculptor White, violinist Black, and artist Redhead - met in a cafeteria. “It is remarkable that one of us has white hair, another one has black hair, and the third one has red hair, though no one’s name gives the color of their hair” said the black-haired person. “You are right”, answered White. What color is the artist’s hair?

2. Fröken Bock backed a giant cake for her birthday party. It is known that PeeWee and the cake weighed as much as Karlson and Fröken Bock. After they ate the whole cake Karlson weighted as much as Fröken Bock and PeeWee together. Prove that piece of cake eaten by Karlson weighted as much as Fröken Bock before the birthday party.

3. In a box there are color pencils: 8 red pencils, 8 - blue, 8 green, and 4 yellow. We take pencils from the box without looking at them. What is the minimal number of pencils to take in order to get a) at least 4 pencil of the same color b) at least one pencil of each color c) at least 6 blue pencils.

4. Cut the shadowed part of the picture below into four equal parts.

5. Is it possible to arrange six long round pencils so that each of them touches all the others?

6. Three people - A, B, and C - are sitting in a row in such a way that A sees B and C, B sees only C, and C sees nobody. They were shown 5 caps - 3 red and 2 white. They were blindfolded, and three caps were put on their heads. Then the blindfolds were taken away and each of the people was asked if they could determine the color of their caps. After A, and then B, answered negatively, C replied affirmatively. How was that possible?

7. A special chess piece called a "camel" moves along a 10x10 board like a (1,3) knight. That is, it moves to any adjacent square and then moves three squares in any perpendicular direction (the usual chess knight’s move can be described as of type (1,2)). Is it possible for a camel to go from some square to an adjacent square?