



XXVII International Math Olympiad For Elementary School "Two Times Two"

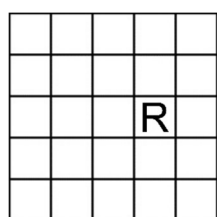
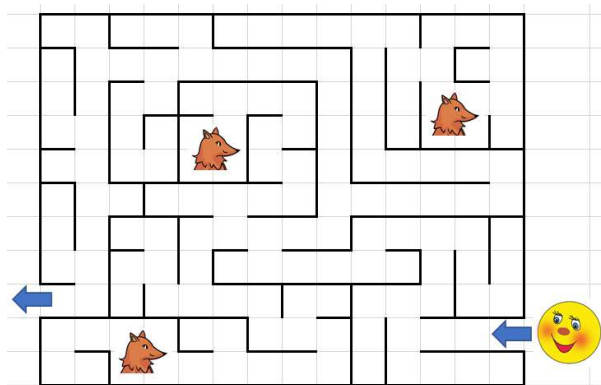
February 11, 2024

Junior group, 1st grade.

Read the tasks carefully. You can solve them in any order you like. Your answers and solutions must be written on the answer sheet.

Task 1. In a row of one-digit numbers cross out two numbers so that all that are left (except for the first one and the last one) has either two neighboring numbers that are bigger or two neighboring numbers that are smaller: 1 5 2 8 9 4 7 6 3

Task 2. The pancake man has to go through a maze and avoid being eaten by a fox. A fox can eat the pancake if it can reach the pancake without crossing any walls. Build two walls 1 cell long so that the pancake can safely go through a maze.



Task 3. A robotic cat can jump to any adjacent cell, but he only has charge for three jumps. Mark all the cells where a mouse can safely sit without moving anywhere.



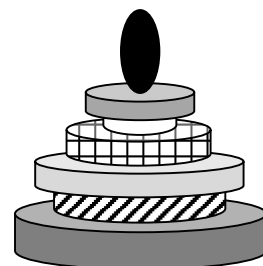
Task 4. Children built 5 snowmen that can have similar or different hats, noses, arms and buttons. Rearrange the snowmen (place them in a row) so that neighboring snowmen have exactly two differences among these characteristics.

Task 5. Yoda received a birthday gift in a box tied with one rope, as shown in the picture. Yoda cut the box with a lightsaber along the dotted line, without untying it, and burned the knot. How many pieces of rope did he end up with?



from above. Draw a picture of what he got.

Task 6. James built a pyramid using six rings and a top, as shown in the picture, and took a picture of it



Task 7. If three boys leave the room, only girls will remain. And if two girls leave the room, only boys will remain! How many children are in the room?

Task 8. Karlsson had only a 3-øre coin. He bought a toffee, received change and said, "I have more money left than I paid!" This turned out to be not true. How much did the toffee cost?