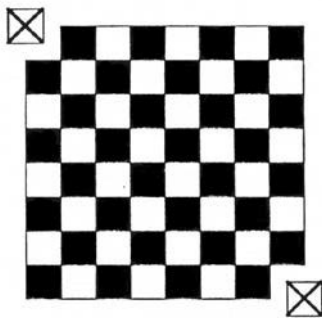


Exercise 1:

- Exercises 1-1: Missionaries & Cannibals: Three missionaries and three cannibals come to a river and find a boat that holds two. If the cannibals ever outnumber the missionaries on either bank, the missionaries will be eaten. How can all six get across the river? Exercise could be done in the following page: [Missionaries and Cannibals - Play Free Online | Fundecade.com](https://www.fundecade.com/missionaries-and-cannibals/).
- Exercise 1-2: A traditional puzzle problem example -- “how to put ten coins in five straight rows with four coins in each row?”
- Exercise 1-3: The mutilated checkerboard problem: a standard 8 by 8 checker board with two diagonally opposite corners removed. The problem is to cover the 62 remaining squares using 31 dominos, each domino covers two adjacent squares. Prove if you could solve this problem.



- The final solutions of these three problems are fixed or told. Your job is to find the way to solve the problems.
- Record your problem-solving processes step by step from the beginning to the completion of the final solution on papers.