GAME OF 15 is played as follows. Two players write down the numbers from 1 to 9:

\[
1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9
\]

On his turn, Player I puts a circle around one of the numbers:

\[
1 \quad 2 \quad 3 \quad \bigcirc \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9
\]

Then Player II puts a box around some other number:

\[
1 \quad 2 \quad 3 \quad \bigcirc \quad \square \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9
\]

Player I puts a circle around another number:

\[
1 \quad \bigcirc \quad 2 \quad 3 \quad \bigcirc \quad 4 \quad 5 \quad 6 \quad \bigbox \quad 7 \quad 8 \quad 9
\]

Player II:

\[
1 \quad \bigcirc \quad 2 \quad \bigcirc \quad 3 \quad \bigcirc \quad 4 \quad 5 \quad 6 \quad \bigbox \quad \bigbox \quad 7 \quad 8 \quad 9
\]

And so on. The goal of each player is to select three numbers adding up exactly to 15. For instance, in the situation shown below Player I wins, since \(2 + 4 + 9 = 15\):

\[
1 \quad \bigcirc \quad 2 \quad 3 \quad \bigcirc \quad 4 \quad 5 \quad \bigbox \quad \bigbox \quad 7 \quad 8 \quad 9
\]

**Problem 1.** Play a few rounds of GAME OF 15 in your group. Can you figure out any useful tactics?

**Problem 2.** Do you know how to play Tic-Tac-Toe? Discuss the strategy for playing Tic-Tac-Toe in your group and then use the space below to briefly describe it.
**Problem 3.** Can you fill in the $3 \times 3$ grid below with numbers $1, 2, \ldots, 9$ in such a way that the sums of the numbers in every row, every column, and both diagonals are equal to 15?

```
  +---+---+---+
  |    |    |    |
  +---+---+---+
  |    |    |    |
  +---+---+---+
  |    |    |    |
  +---+---+---+
```

**Problem 4.** Combine your solutions to Problems 2 and 3 to find a strategy for playing Game of 15.

**Problem 5.** Play a few rounds of Game of 15 using your strategy from Problem 4.