**MindRoll Game Rules**

# 1. Game Overview

This is a turn-based dice game where players aim to outwit their opponents through strategic betting and psychological tactics.  
Each player is assigned a random dice with specific attributes, including a number and a color.  
The game supports both two-player and multiplayer modes, with points updated after each round based on the outcome.

# 2. Dice Attributes

Each player is randomly assigned a dice with the following attributes:

* **Number**: A random integer between 1 and 6.
* **Color**: Randomly assigned as one of the following five colors:
  + **Red**
  + **Yellow**
  + **Green**
  + **Blue**
  + **Black**

# 3. Gameplay Process

**(1) Game Start**

* Players register and log in, after which the system matches them to a game.
* Each player is assigned a random dice (number 1–6, one of five colors).
* **Two-player mode**: A random player is selected to start the first round.
* **Multiplayer mode**: A random player is selected to start, with the initial call required to be greater than or equal to **3 × n + 1**, where n is the number of players.

**(2) Turn-Based Calls**

* Players take turns to make calls:
  + **Two-player mode**: The turn alternates between the two players.
  + **Multiplayer mode**: The next player is randomly selected by the system, though some players may repeat before all others have had a turn.
* Each call must be greater than the previous one:
  + **Two-player mode**: The initial call must be **7 or higher**, with a maximum call of **12**.
  + **Multiplayer mode**: The initial call must be **3 × n + 1 or higher**, with a maximum call of **6 × n**.

**(3) Reveal Result**

* When a player chooses to reveal the result, the system evaluates the outcome based on the following rules:
  + **Two-player mode**: The outcome is determined between the two players.
  + **Multiplayer mode**: The outcome is determined only between the **revealing player** and the **previous caller**, with the total sum of all players' dice numbers used for the calculation.

# 4. Winning and Losing Rules

**(1) Color Rule**

* If the dice colors of the revealing player and their opponent are identical (e.g., both red), the revealing player automatically loses.

**(2) Number Rule**

* If the dice numbers of the revealing player and their opponent are identical (e.g., both have 4), the revealing player automatically loses.

**(3) Total Sum Rule**

* If the colors and numbers are different, the outcome is determined as follows:
  + If the **current call > the total sum of all players' dice numbers**, the revealing player wins.
  + If the **current call ≤ the total sum of all players' dice numbers**, the revealing player loses.

# 5. Scoring Rules

* **Winner**: The winning player earns **+1 point**.
* **Loser**: The losing player loses **-1 point**.
* **Non-participants**: Players not involved in the outcome are unaffected.
* **Initial Score**: All players start with a score of **0**.

**Scoring Example**

* Players A, B, and C participate in a game:
  + Player A chooses to reveal the result and challenges Player B.
  + Player A wins, resulting in:
    - **Player A**: +1 point.
    - **Player B**: -1 point.
    - **Player C**: No score change.

# 6. Winning and Losing Examples

**Example 1: Multiplayer Mode - Outcome and Score Update**

* Player 1's dice: Number 4, Color Red.
* Player 2's dice: Number 5, Color Green.
* Player 3's dice: Number 6, Color Blue.

**Flow**:

1. The system selects Player 1 to start, and Player 1 calls **15**.
2. The system selects Player 3 to continue, and Player 3 calls **16**.
3. Player 2 chooses to reveal the result:
   * The total sum of all dice numbers = 4 + 5 + 6 = 15.
   * The current call = **16**.
   * Player 2 wins, and Player 3 loses.

**Score Update**:

* **Player 2**: +1 point.
* **Player 3**: -1 point.
* **Player 1**: No score change.

**Example 2: Two-Player Mode - Reveal Failure and Score Update**

* Player 1's dice: Number 3, Color Yellow.
* Player 2's dice: Number 6, Color Blue.

**Flow**:

1. Player 1 starts with a call of **10**.
2. Player 2 chooses to reveal the result:
   * The total sum of dice numbers = 3 + 6 = 9.
   * The current call = **10**.
   * Player 2 wins.

**Score Update**:

* **Player 2**: +1 point.

**Player 1**: -1 point.