

Math game Sums and Differences Game



Educational Goals

- Highlight the playful potential of mathematics
- Develop the mental calculation process
- Develop mathematical reasoning

Key Features of the Targeted Competency

- To mobilize mathematical concepts and processes appropriate to the given situation (C2)
- To apply mathematical processes appropriate to the given situation (C2)
- To justify actions or statements by referring to mathematical concepts and processes (C2)

Concepts Used

- Arithmetic (additions and subtractions)
- Reasoning

Materials

- Sheets of paper
- Pencils





Targeted Competency



Mathematical Field Concerned



Suggested Teaching Formula



Time Required Approximately 15 minutes







Suggested Process



Step 1: Introduction

Place the students in teams of 2. Provide one sheet and one pencil per team.

Step 2: The game (15 minutes)

The goal of the game is to find a strategy to block the other player so he cannot make equations anymore.

On a number line, write a series of 20 consecutive numbers.

Example:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

The first player chooses 2 numbers in the number line, that he adds or subtracts. He crosses the numbers chosen and circles the answer to his equation. The answer necessarily has to be in the number line.

The second player has to start using the number that was circled by the other player to make his equation. He adds or subtracts it to another number in the number line. He crosses the two numbers used for his operation (including the circled one) and circles his result. Once the numbers have been crossed, they cannot be used anymore.

The game is over when a player can no longer make equations. He then loses the game. The players have to use logic and strategy to block the other player's possibilities.