



PUZZLING CARTOON

- THE BIRTHDAYS -



Educational Goals

- ❖ Develop logic
- ❖ Highlight the playful potential of mathematics
- ❖ Raise consciousness about implicit constraints

Key Features of the Targeted Competencies

- ❖ To decode the elements that lend to a treatment
- ❖ To elaborate a mathematical solution
- ❖ To validate the solution
- ❖ To share the information relative to the solution
- ❖ To define the elements of the mathematical situation
- ❖ To form and apply a network of concepts and mathematical processes

Concepts Used

- ❖ Arithmetic (addition)
- ❖ Equal and unequal relations
- ❖ Maximum and minimum

Materials

- ❖ Video of the puzzle
- ❖ Sheets of paper
- ❖ Pencils
- ❖ Calendars of the full year (available in the school agenda)
- ❖ Written copies of the puzzle (optional)

Targeted Academic Levels
Grades 7 to 11

**Mathematical Field
Concerned**



**Suggested Teaching
Formula**



Time Required
25 minutes



SUGGESTED PROCESS



Step 1: Introduction (2 minutes)

Play the puzzle's video a first time.

A written version of the puzzle's statement is available in the appendix of this document. If you believe it is necessary, you can project it or distribute copies to your students

Play the video a second time to allow the students to thoroughly understand the information.

Step 2: Finding the solution (18 minutes)

Place the students in pairs so they can try to find the solution. Tell the students to refer to their school calendar (available in the agenda) for information such as the number of days in each month and the digit corresponding to the month.

Step 3: Reveal the solution (5 minutes)

There are, at the most, 8 people in the group of friends.