



PUZZLING CARTOON

- THE LEGEND OF THE BETTING CHIEF -



Educational Goals

- ❖ Algebraically express a situation using a system of equations
- ❖ Solve a system of first degree equation
- ❖ Understand and interpret arithmetic means

Key Features of the Targeted Competency

- ❖ To form and apply a network of concepts and mathematical processes
- ❖ To perform demonstrations and proofs

Concepts Used

- ❖ System of equations
- ❖ Algebra
- ❖ Mean

Materials

- ❖ Video of the puzzle
- ❖ Written copies of the puzzle

Targeted Academic Level
Grades 9 to 11

Mathematical Fields Concerned



Suggested Teaching Formula



Time Required
Approximately 25 minutes



SUGGESTED PROCESS



Step 1: Introduction (5 minutes)

Present the video of the puzzle a first time (www.amazingmaths.ulaval.ca).

A written version of the puzzle is available via the Explanation Sheet. If you believe it is necessary, you can project it or distribute copies to your students.

Present the video a second time to allow the students to thoroughly understand the information. Pause on the last image where we see the six adventurers sat around the table with the mean announced by each of them.

Step 2: Finding the solution (15 minutes)

Place the students in pairs so they can try to find the solution. Encourage the students to take notes to help them in their solving approach.

You may guide the students by asking them to algebraically write what represents the mean of two numbers.

Step 3: Reveal the solution (5 minutes)

Refer to the Explanation Sheet for the puzzle “The Legend of the Betting Chief”. Explain to the students that it is possible to omit the means announced by the second adventurer, the fourth adventurer and the group’s chief, and still solve the puzzle.