



PUZZLING CARTOON

- ZIGZAG -



Educational Goals

- ❖ Develop logic
- ❖ Highlight the playful potential of mathematics
- ❖ Establish an efficient process to ease a complicated problem
- ❖ Construct the relations allowing to calculate the area of plane figures

Key Features of the Targeted Competency

- ❖ To define the elements of the mathematical situation
- ❖ To mobilize and apply concepts and processes appropriate to the given situation
- ❖ To justify actions or statements by referring to mathematical concepts and processes

Concepts Used

- ❖ Symmetry
- ❖ Area (Squares, triangles, trapezoids)
- ❖ Changing units of measurement

Materials

- ❖ Video of the puzzle
- ❖ Sheets of paper
- ❖ Pencils
- ❖ Written copies of the puzzle (optional)

Targeted Academic Levels
Grades 7 to 11

Mathematical Field Concerned



Suggested Teaching Formula



Time Required
Approximately 20 minutes



SUGGESTED PROCESS



Step 1: Introduction (2 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.

Step 2: Finding the solution (15 minutes)

Place the students in pairs so they can try to find the solution. You can mention to your students that this problem comes from an AQJM's competition and that the calculator is forbidden. You can also mention to them that there is a very easy solution and that the goal for this problem, in addition to finding the solution, is to get there in a nice way.

Step 3: Reveal the solution (3 minutes)

Refer to the Explanation Sheet for the puzzle "Zigzag".