



Monday cup #6

Posted on: May 6, 2019

Due on: May 12, 2019



Problem

Aramat visited a famous Center called “artuafa” located near 41st parallel. It was a round structure consisting of 60 steps in spiral stairway to reach top. From top you can have overview of natural beauty surrounding that place. Aramat thought of reaching the top. She also carried a lot of chocolates with her for kids. In the process of climbing up, with each step a chocolate falls from her bag. When she reaches top, she gives half of the chocolates left with her to small kids. Again, in the process of climbing down a chocolate falls down with each step. She repeats the same process at five once and now she is left with no chocolates. Can you find out the total number of chocolates she had with her initially?

There were correct solutions from Anamaria Megrelidze (Georgia, the country), Tornike Tsulukidze (Georgia, the country), Dato Tavdgiridze (Georgia, the country), Nika Darsalia (Georgia, the country) and Gela Tsetskhladze (Georgia, the country).

The prize was split between Tavdgiridze and Darsalia

Rules

1. Anyone is eligible to participate. Each solution is to be the work of one individual without any input from faculty or others. An answer must be accompanied by appropriate justifications to be considered correct.
2. The solution is to be submitted with the solver’s name, email, year in school (if applicable), local phone number, and local address. If you are submitting this for possible credit in a class, include your class number and instructors name.
3. The solution is to be typed or legibly written. Solutions must be submitted to the by 2 p.m. on the due date.
4. Entries will be graded on clarity of exposition and elegance of solution. An award of **GEL10** will be given for the best correct solution. In the case of a two-way tie, the award will be split. If there are more than two best solutions, a drawing will be held to determine two award winners.
5. Graduate students, faculty, and members of the general public are encouraged to submit solutions, but they will not be considered.

გამზადებთ თქვენ, кубок понедельника, Monday cup, Coppa del lunedì, Coupe du lundi

Solution for this problem can be submitted proveweek@gmail.com