Monday cup #22

Posted on: August, 26,2019
Dueon: September,01,2019

Problem

Question: **A "Kaxaberi" store clerk regards as a lucky number any** positive integer that cannot be **obtained as a sum of sevens and/or elevens. For instance, 13** and 20 are lucky numbers, while **14 = 7 + 7, 25 = 7 + 7 + 11, 40 = 7 + 11 + 11 + 11, and** 44 = 11 + 11 + 11 + 11 are not. **Find (with proof) the largest lucky number.**

There were correct solutions from Nika Darsalia (Georgia, the country).

The prize was split between 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.

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ორშაბათის თასი, кубок понедельника, Monday cup, Coppa del lunedì, Coupe du lundi
Solution for this problem can be submitted proveweek@gmail.com