



Monday cup #11

Posted on: June 10, 2019

Due on: June 16, 2019



Problem

Lower Elementary:

Question: a fish "Salmon" was caught whos tail weighs 9 pounds. His head weighed as much as his tail and half his body,and his body weighs as much as his head and his tail. how much does the fish "Salmon" weigh

Upper Elementary:

Question: What number is exactly between $1/7$ and $2/7$?

Middle School:

Question: you glance at the clock, Before you go out to lunch the cafe, . When you come back from lunch, you **glance at the clock** again, and you notice something strange: the minute and the hour hand have exchanged places from the positions they had just before you went to lunch.
The question is: how long were you away?



Algebra and Up:

Question: An ordinary 3X3 magic square contains every positive integer from 1 through 9,with one integer

per cell, such that the sums of the numbers in each row, each column and each diagonal are the same. When the ordinary magic square shown is completed, what is the sum of all the possible values of x ?

	x	
	5	
		$x+1$

There were correct solutions from **Matthew Fitzpatrick (U.S. state of Mississippi).**

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.

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