SCHOLASTIC (familial) MATH LEAGUE 2019/2020 Math problems for primary school grades 5 and 6

# Set 3

/ deadline December 12, 2019 /

#### Problem 1

The three containers had 108 liters of water in total. If 12 liters of water were poured from the first container into the second one and then 8 liters of water were poured from the second one to the third, it turned out that there was the same amount of water in each container. How much water was in each and every container at the beginning?

## **Problem 2**



The five-digit natural number 24?8?is divisible by 4, 5 and 9. What is the sum of digits that should be put in place of the question marks?

# **Problem 3**

Fourth, fifth and sixth grades are picking up acorns. For every 20 kg, the class receives points. Five girls agreed to go acorn picking together. Małgosia collected  $2\frac{1}{4}$  kg, Agata  $1\frac{5}{8}$  kg, Ania  $2\frac{3}{4}$  kg, Ola  $3\frac{1}{6}$  kg and Kasia  $2\frac{7}{12}$  kg. How much are they missing up to 20 kg?

#### **Problem 4**

The century-old oak produces 1.7 kg of oxygen per hour. How many such trees are needed to supply oxygen in one hour to 34 students, if it is known that each student uses 700 g of oxygen to breathe during one hour?

## Problem 5

How will the quotient change if we multiply the dividend by 2.25, and divide the divisor by 2.4?