SCHOLASTIC (familial) MATH LEAGUE 2019/2020

Math problems for primary school grades 5 and 6

Set 5 / deadline February 27, 2020 /

Problem 1

How many three-digit numbers divisible by 9 can be composed of 2, 3, 4? Each of the numbers should comprise all the three digits listed.

Problem 2

10 cartons are arranged in a row on the table. The first carton has the number 1 on it, the second one has the number 2, and each subsequent carton has the sum of the numbers from the two preceding cartons. What number is on the tenth carton?

Problem 3

A rich man made the last will dividing his property between his wife and two sons as follows: his wife was to receive twice as much property as her younger son, and her older son was supposed to get twice as much property she was. What part of the property will the youngest son receive?

Problem 4

How many 400 m² lots can be divided into a square shaped meadow with a side length of 1 km?

Problem 5

A rectangular fragment of the map with a scale of 1: 300,000 and dimensions of $10 \text{ cm} \times 10 \text{ cm}$ was enlarged by meand of a photocopier, receiving a print with dimensions of $20 \text{ cm} \times 20 \text{ cm}$. What is the actual (real life) distance of the points whose images on the photocopied print are 3 cm apart?