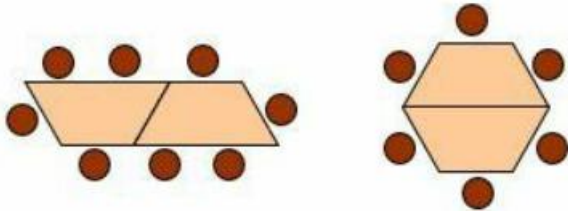# SCHOLASTIC (familial) MATH LEAGUE 2019/2020

Math problems for primary school grades 5 and 6

Set 7 /deadline April 30, 2020 /

Problem 1

The classroom has benches in the shape of an isosceles trapezoid that is half of a regular hexagon. One person can sit at each of the short sides, and two at the longer one. Two benches can be combined, creating space for 6 or 8 people as shown.

How many benches do you need to set up and how should you do that such that exactly 10 people will be seated at the benches according to the conditions as described above? Sketch the setup of the benches.
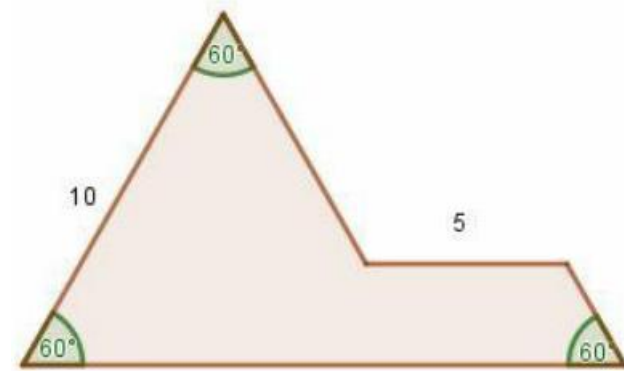
Problem 2

Mr. Kowalski said that when you multiply the sum of his three children's age by his age (all expressed in natural numbers), you get 128. How old are Mr Kowalski and his children if the father's age is a number with the sum of the digits equal to 5?

Problem 3

If you put the digit 0 between the digits of a certain two-digit number, the number will increase nine times. What number is it?

Problem 4

What is the perimeter of the shape called the Sphinx shown in the figure below?

Problem 5

A large bar of chocolate weighs 50 g more than the small bar of chocolate, however, it weighs 50 g less than two small bars of chocolate. How much does the small bar of chocolate weigh?