Carl Friedrich Gauss and the formula for the sum of the first n natural numbers

Aleksandra Ravas¹

 $^1{\rm Raiffeisen}$ banka a.d. Beograd, Srbija, aleksandra.ravas@gmail.com

It is likely that rare are those who haven't heard the story from Gauss' (1777-1855) youth: one day his primary school teacher asked the pupils to calculate the sum of the first 100 natural numbers. Gauss quickly announced the result was 5050, which is correct. How did he manage to do that? What was the exact task, to find sum of the first hundred natural numbers, or some other consecutive hundred numbers, as some sources cite? Did Gauss find the formula by himself during the class, or perhaps he knew it all along? The aim of this paper is to search for answers to posed questions.