

Summary in English

Erik M. Alfsen, *Karl Egil Aubert 1924–1990* (Norwegian).

A brief biography of the Norwegian algebraist Karl Egil Aubert.

Uffe Thomas Jankvist and Neslihan Sağlanmak, *What did they seek and what did they find? Combinatoric solutions for algebraic equations – from Cardano to Cauchy – Part 1* (Danish).

A history of algebraic equation solving before Gauss, Abel and Galois, more specifically in the period from 1545 to 1815. In this first part of the article the authors present the methods of Cardano, Viète, Tschirnhaus, Waring and Vandermonde, but also discuss contributions from Ferrari, Girard, Euler and Bézout. The article focuses on the use of combinatorics, permutations and invariance considerations in algebraic equation solving. Some of the points made in Part 1 concern the influence of alchymistic thoughts in these methods. Also the authors argue that the period from 1546 to 1770 is not as ‘blunt’ as it might seem at first glance.

Ståle Gundersen, *Does it follow from Gödel’s incompleteness theorems that we are not machines?* (Norwegian).

The Austrian logician Kurt Gödel proved the two incompleteness theorems in 1931. The first of these states that within each mathematical formal system there exists a true sentence (the Gödel sentence) that cannot be proven within the formal system. The second states that the consistency of a formal system cannot be proven by the system itself. Since computers are machines which can instantiate formal systems,

the philosopher J. R. Lucas and the physicist and mathematician R. Penrose have argued that Gödel’s two incompleteness theorems imply that human beings cannot be machines (computers). According to their argument, we are not machines because we know we can be consistent, but unlike the machines we can also prove that the Gödel sentence is true. The author presents the Lucas/Penrose argument and rejects it as invalid.

Johan Häggström, *The concept of function in historical light* (Swedish).

In spite of being one of the most important mathematical concepts, the concept of function can be, and has been, described and defined in many ways. The article exposes the diversity by showing examples from textbooks and by a brief journey through the history of function. Three aspects of the development are highlighted.