

Summary in English

Audun Holme, *Arabic mathematics* (Norwegian.) This is the first of two articles on Arabic mathematics. The Arabs have not received proper credit in the Western version of the History of Mathematics; many of their important discoveries were attributed to Western mathematicians like Fermat, Pascal or Descartes. The author starts out with the House of Wisdom in Baghdad, one of the eminent centres of culture and learning rivaling the ancient academies in Athens and in Alexandria. Al-Khwarizmi, the father of algebra, worked there. After describing some central themes from the work of this great mathematician, the author discusses the life and work of several other eminent Arab mathematicians of the Middle Ages, ending with the remarkable poet and scholar Omar al-Khayyami, who worked on cubic equations.

D. Laksov, *Discrete mathematics does not exist* (Norwegian.) The author argues that there is no such thing as *discrete mathematics*. He gives examples showing that even on finite sets and the integers there are natural and useful concepts of distance. He also points out that much of the mathematics that is erroneously termed *discrete* consist of simple arguments that require no knowledge of mathematics. Most of the much ballyhooed applications of this kind of mathematics consist of naive reformulations of mathematical ideas in the language of everyday life. Several examples illustrate this point.

Signe Holm Knudtzon and Johan F. Aarnes, *Morley's heart – playing with a geometric theorem – part 2*. (Norwegian.) If we are given an equilateral triangle abc , and specify three arbitrary angles α , β , γ , whose sum is equal to 180 degrees, we may construct a triangle ABC which by trisection of each of its angles produces the equilateral abc . This is essentially Morley's trisector theorem, and was discussed in part one of this article. In this second part the authors consider the following problem. If we vary the angles α , β , γ , keeping abc fixed, the triangle ABC will change its shape and position, and so will its incenter, i.e., the center of the inscribed circle of ABC . The incenters will occupy a region inside abc , and the authors show that the boundary of this region is made up of three branches of hyperbolas. They also consider the same problem for the incenters of the equilateral triangles obtained by trisecting one angle internally and two angles externally. An interactive version of this article may be found on <http://shk.ans.hive.no/>.