Summary in English

Nils Baas and Christian Skau, *Selberginterviuet I - Matematisk Oppvext* (Norwegian).
This is part one of four of an interview with Atle Selberg (1917-2007) conducted a couple of months before he died. It treats his childhood and youth up to his departure for the US after the war. It is a mixture of private reminiscences, mostly of interest to Norwegians, and his mathematical awakening. Selberg was the youngest child in a family of five children, three of which became professors of mathematics. His first recorded mathematical discovery was that squares differed by the odd numbers made at the age of seven or so. At fifteen he discovered a connection between the integral $\int_0^1 \frac{dx}{x^x}$ and the series $\sum_{n=1}^{\infty} \frac{1}{n^n}$ which was also published as a note, incidentally in Normat (1933). Early on he encountered the works of Ramanujam and his first article (*Über einige arithmetische Identitäten*) treated mock theta-functions and was sent to Watson (of Whittaker and W.) who, however, was very tardy. For his preliminary work at the university of Oslo in 1939 under Skolem he considered modular forms represented by Poincaré series. It turned out to be extensive enough to have qualified as a doctoral dissertation, but for that he had other plans. But even before that he had extended work on the partition function done by Hardy and Ramanujam only to discover that he had been anticipated by Rademacher. It was a big disappointment and he decided not to publish it, although his results were sharper.

He spent some time at Uppsala, which had a better library than Oslo, where he learned for the first time of the hyperbolic plane. In fact his geometrical education had been spotty, and he had encountered the trigonometric functions for the first time in his life in connection with Eulers formulas! During the German invasion of Norway he was drafted into the military resistance, which, however, did not last long and permitted him to return to mathematics, in which he now started to focus on the Riemann zetafunction. His improvement on the estimates of Hardy and Littlewood were so spectacular that when H. Bohr was asked what had happened in European mathematics during the war he simply replied – Selberg.

Paul Papatzacos, *Formler for π fra femtenhundretallets Kerela* (Norwegian).
The Leibniz formula $\frac{\pi}{4} = 1 - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} \ldots$ is of course well-known, and one of the first infinite series for π which people usually encounter. However, it was known in India long before it was rediscovered by Gregory and Leibniz. Its convergence is very slow, but it can be souped up by adding an appropriate rest term, which was also known to the Indians in Kerala. How did they find it? By trial and error, or maybe by continued fractions? The latter gives an elegant, but maybe anachronistic explanation. Rewampings of the series as $\frac{\pi}{4} = \frac{7}{9} + 36 \sum_{m=1}^{\infty} \frac{1}{((n^3-n)(n-1)^2+5)((n+1)^2+5)}$ with $n = 2m+1$ were known to them already in the 16th century.