From Archimedes to Bernoulli, that’s A to B.

A formula for \( S_p(n) = 1^p + 2^p + \ldots + n^p \)

Abstract


Archimedes, Al-Karaji, and Ibn Al-Haytham, had obtained formulas for \( p=2, 3, 4 \). Pascal, Wallis and Leibniz developed methods to derive a formula for any given \( p \). Using calculus, Jacques Bernoulli I solves the general problem. But there was a surprise; the general solution involved the now famous sequence \( \beta_p \) of “Bernoulli numbers”.

Tuesday, November 14, 2000
3:00 p.m.
Yates 215

Students are encouraged to attend. There will be cookies and conversation afterwards in Yates 210.