## the cubic function

## AND OTHER STRANGEALGEBRA

## >>>>>>>>>>>

Presented by:

## Walter Stromquist, Research Associate in Mathematics at Bryn Mawr College



The cubic formula, and how to remember it or reconstruct it if you forget. It isn't complicated: If you want to solve $x^{3}+3 p x=2 q$, find any number $t$ whose square is $p^{3}+q^{2}$ and any number $u$ whose cube is $q+t$. Then $x=u+p / u$ satisfies the equation. We will see why
this formula is so much less satisfying than the quadratic formula, and how people really find roots of cubes.

But I might not get very far with that, because first I want to tell a story about a second grader who learns about pixies and fairies, and wonders whether the fairies know how to add fractions.

