do not take natural language too seriously

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Seminar Formal Mathematics
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2007 04 17, 13:00
programming languages

C:

    i++;  

Cobol:

    ADD 1 TO i.

HyperTalk:

    function delimitedSum theList, listDelimiter
        put the itemDelimiter into storedDelim -- save itemDelimiter for restore
        if listDelimiter is empty then put comma into listDelimiter -- like 'sum'
        else set the itemDelimiter to char 1 of value(listDelimiter) -- UNlike 'sum'
        put 0 into sumOfItems
        repeat with i = 1 to number of items in theList
            add value(item i of theList) to sumOfItems -- try to convert to a number
        end repeat
        set the itemDelimiter to storedDelim -- restore itemDelimiter
        return sumOfItems
    end delimitedSum

making a programming language looks like natural language is a silly idea
formulas

solutions of $x^3 + px = q$:

**modern style:**

$$x = \sqrt[3]{\frac{q}{2} \pm \sqrt{\left(\frac{q}{2}\right)^2 + \left(\frac{p}{3}\right)^3}} - \sqrt[3]{-\frac{q}{2} \pm \sqrt{\left(\frac{q}{2}\right)^2 + \left(\frac{p}{3}\right)^3}}$$

**ancient style** (Gerolamo Cardano, *Ars magna*, Nürnberg, 1545):

Cube the third part of the number of unknowns, to which you add the square of half the number of the equation, and take the root of the whole, that is, the square root, which you will use, in the one case adding the half of the number which you just multiplied by itself, in the other case subtracting the same half, and you will have a binomial and apotome respectively; then subtract the cube root of the apotome from the cube root of the binomial, and the remainder from this is the value of the unknown.
Bertrand’s postulate:

**HOL Light:**

\[ !n. \neg(n = 0) \Rightarrow \exists p. \text{prime } p \land n \leq p \land p \leq 2 \cdot n \]

\[
\forall n. n \neq 0 \Rightarrow \exists p. \text{prime } p \land n \leq p \land p \leq 2 \cdot n
\]

**Mizar:**

for n being Element of NAT st n\geq1 holds

ex p being Prime st n<p \& p\leq2*n

For all n being an element of the natural numbers such that \( n \geq 1 \) holds that there exists a \( p \) being prime such that \( n < p \) and \( p \leq 2n \).
submarines aren’t fishes

The question of whether machines can think is about as relevant as the question of whether submarines can swim.