



Ruby ♥ λ Calculus

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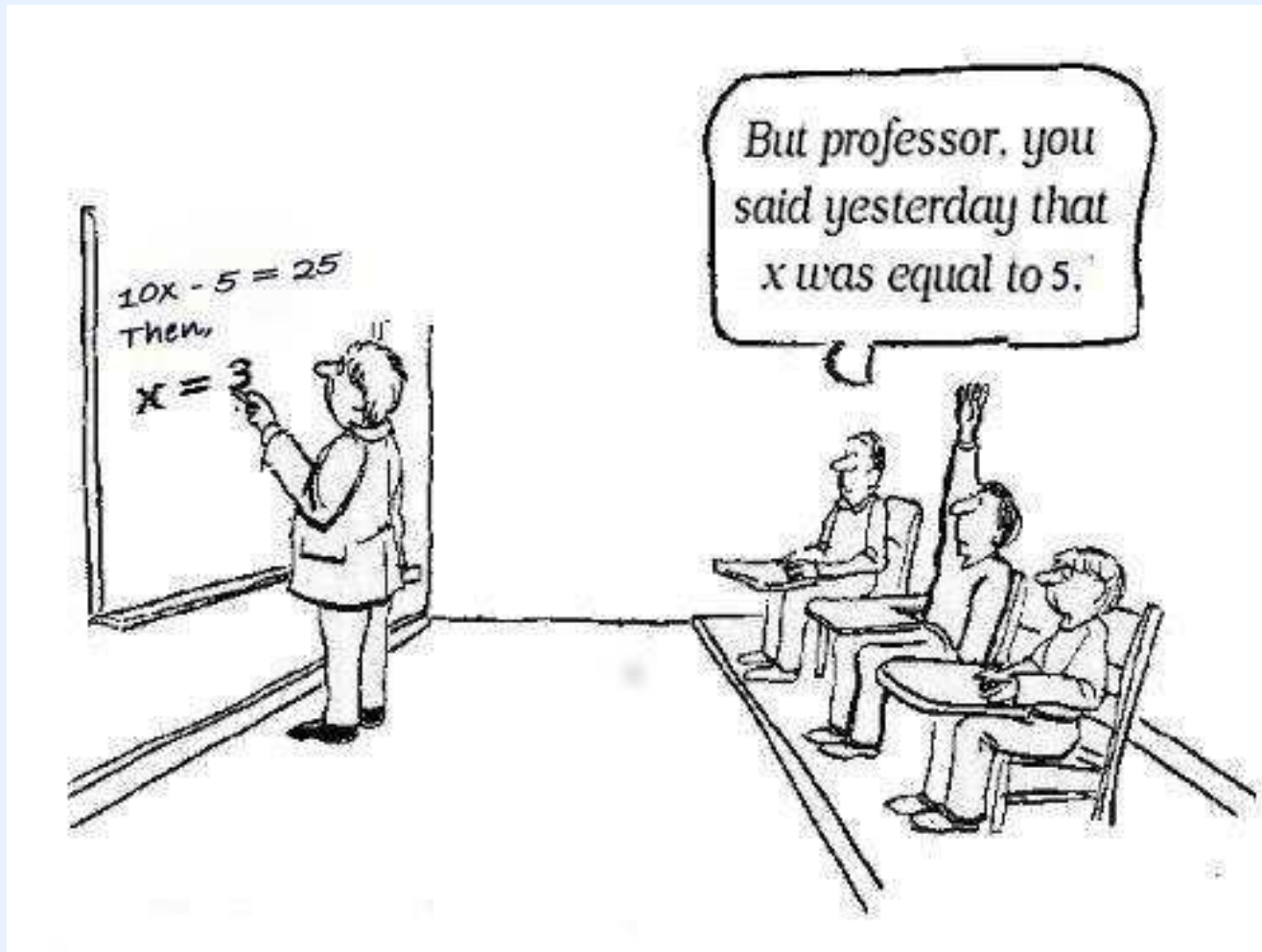
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Math Can be Difficult, but Fun!

- Mathematics is about finding patterns.
- Mathematics is usually the simplest way to talk about complex subjects.
- Mathematics can be confusing because of:
 - bad notation,
 - bad textbooks,
 - bad teachers,
 - *and sometimes ...*

...Bad Students



Computer Science is Mathematics

- Computer science **is not** computer programming.
- Computer science **is not** software engineering.
- Computer science **is not** science, it's better than that:
- Computer science **is actually** mathematics.
- Computer science **really is** useful for computer programmers, in spite of some arguments to the contrary.

Lambda Calculus

- Lambda calculus **is not** the same “calculus” you learned in your high school or college “Calculus” class.
- It’s a different calculus: there are a lot of others than just these two (and a lot of other algebras than the normal one as well.)
- It is actually **easier to use** for specific tasks than other options (typically making mathematical proofs about algorithms.)

Alonzo Church Invented It



“Lambda’s where it’s at.”

Questions?