

Re: is  $f(x) = ax+b$  a linear function?

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- From: "alainverghote@xxxxxxxx" <alainverghote@xxxxxxxx>
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Arturo Magidin a écrit :

In article <1160295510.951753.276440@xx>, alainverghote@xxxxxxxx <alainverghote@xxxxxxxx> wrote:

In French we possess two words:  
 linear  $f(x) = a * x$   
 and affine  $f(x) = a * x + b$ ,

Those two also exist in English, and they are the same.

But that is in a more restricted context. When, in for example calculus, one talks about families of functions, they usually include the polynomial functions, the exponential functions, logarithmic, trig, etc. The polynomial functions are often divided according to the degree of the polynomial, into "constant functions" (the 0 function and degree 0 polynomial functions), "linear" or "degree 1" functions (polynomial functions given by a polynomial of degree 1), "quadratic" or "degree 2", "cubic" or "degree 3", etc.

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 "It's not denial. I'm just very selective about  
 what I accept as reality."  
 --- Calvin ("Calvin and Hobbes" by Bill Watterson)  
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Arturo Magidin  
magidin-at-member-ams-org

Bonjour Arturo ,

O.K,  
more generally  $Op(a*x) = a * Op(x) + b$  , Op for operation,

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operators, functions . . . a, b ,constant numbers  $a \neq 0$ ..

Alain

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