1 Introduction

$CrInGeCrInGeProduction.Supercringeintroductionhere:$

2 Some basic knowledge about researching problem...

Parameters and constants we use in this work:

Constants (3):
e = 2.718282
pi = 3.141593
AbObA = 1337.228690
Variables (3):
a = 3.141500
kek = 13.000000
x = 1.000000
Parameters of exploration :
Number of differentiates : 0
Macloren's accuracy : 0
Tangent point : 0.200000
Delta coverage of tangent point: 2.500000
Graph diapasone : $[-1 : 15]$
So let's calculate smth with a given function: f(a, kek, x) = $\cos\left(a + \frac{kek}{1.000^{AbObA}}\right) + \ln\left(1.000 + x \cdot kek \cdot \left(1.000^{(\ln e)} - 0.000\right)\right)$
Firstly, let's insert all constants: f(a, kek, x) = $\cos\left(a + \frac{kek}{1.000^{1337.229}}\right) + \ln\left(1.000 + x \cdot kek \cdot \left(1.000^{(\ln 2.718)} - 0.000\right)\right)$
And simplify this expression (if possible): f(a, kek, x) = $\cos(a + kek) + \ln(1.000 + x \cdot kek)$

3 Exploration the expression as a function of multiple variables

Calculation value of function in the point BRITISH SCIENTISTS WERE SHOCKED, WHEN THEY COUNT IT!!!
In the point $M_0(a_0, kek_0, x_0) = (3.142, 13.000, 1.000)$ **it's value** = 1.73157
Personally, I've always thought about first derivation of something like that function... Haven't you?
But now, by using informatics and math skills I feel that I'm prepared enough to calculate it!
`1 step:` Finding a derivation of kek
When I was child, my father always told me: "Remember, son:
$(kek)' =$
$= 1.000$
`2 step:` Finding a derivation of x
What if:
$(x)' =$
$= 1.000$
`3 step:` Finding a derivation of $x \cdot kek$
It's really easy to find:
$(x \cdot kek)' =$
$= kek + x$
`4 step:` Finding a derivation of 1.000
Sounds logical that it is the same as:
$(1.000)' =$ **... = [top secret] = ... =**
= 0.000
`5 step:` Finding a derivation of $1.000 + x \cdot kek$
What if:
$(1.000 + x \cdot kek)' =$
$= kek + x$
`6 step:` Finding a derivation of $\ln(1.000 + x \cdot kek)$
Sounds logical that it is the same as:
$(\ln(1.000 + x \cdot kek))' =$
$= \frac{1.000}{1.000 + x \cdot kek} \cdot (kek + x)$
`7 step:` Finding a derivation of kek
Even my two-aged sister knows that:
$(kek)' =$
$= 1.000$
`8 step:` Finding a derivation of a
If someone asked me that in the middle of the night, I wouldn't hesitate to say:
$(a)' =$
$= 1.000$
`9 step:` Finding a derivation of $a + kek$
My roommate mumbled it in his sleep all night:
$(a + kek)' =$ **... = [top secret] = ... =**
= 2.000
`10 step:` Finding a derivation of $\cos(a + kek)$
Man... Just look:
$(\cos(a + kek))' =$
$= 2.000 \cdot (-1.000) \cdot \sin(a + kek)$
`11 step:` Finding a derivation of $\cos(a + kek) + \ln(1.000 + x \cdot kek)$
I was asked not to tell anyone that:
$(\cos(a + kek) + \ln(1.000 + x \cdot kek))' =$
$= 2.000 \cdot (-1.000) \cdot \sin(a + kek) + \frac{1.000}{1.000 + x \cdot kek} \cdot (kek + x)$
Congratulations! **The first derivation of the expression** is:
f′(a, kek, x) = $2.000 \cdot (-1.000) \cdot \sin(a + kek) + \frac{1.000}{1.000 + x \cdot kek} \cdot (kek + x)$
In the point $M_0(a_0, kek_0, x_0) = (3.142, 13.000, 1.000)$ it's value = 1.84017

Finding the 0 derivation **Finally... The 0 derivation of the expression:**
$f^{(0)}$(a, kek, x) = $\cos(a + kek) + \ln(1.000 + x \cdot kek)$
BRITISH SCIENTISTS WERE SHOCKED AGAIN, WHEN THEY COUNT THE 0 DERIVATION OF THIS EXPRESSION!!!
In the point $M_0(a_0, kek_0, x_0) = (3.142, 13.000, 1.000)$ it's value = 1.73157

Finding partical derivations Partial derivation of the expression on the variable a:

$\frac{\partial f}{\partial a} = (-1.000) \cdot \sin\left(a + 13.000\right)$

In the point $M_0(a_0,\, kek_0,\, x_0) = (3.142,\, 13.000,\, 1.000)$ it's value $= 0.42008$!!!

Partial derivation of the expression on the variable kek:

$\frac{\partial f}{\partial kek} = (-1.000) \cdot \sin\left(3.142 + kek\right) + \frac{1.000}{1.000 + kek}$

In the point $M_0(a_0,\, kek_0,\, x_0) = (3.142,\, 13.000,\, 1.000)$ it's value $= 0.49151$!!!

Partial derivation of the expression on the variable x:

$\frac{\partial f}{\partial x} = 13.000 \cdot \frac{1.000}{1.000 + 13.000 \cdot x}$

In the point $M_0(a_0,\, kek_0,\, x_0) = (3.142,\, 13.000,\, 1.000)$ it's value $= 0.92857$!!!

Finding full derivation Full derivation:

$\sqrt{((-1.000) \cdot \sin\left(a + 13.000\right))^{2.000} + ((-1.000) \cdot \sin\left(3.142 + kek\right) + \frac{1.000}{1.000 + kek})^{2.000} + (13.000 \cdot \frac{1.000}{1.000 + 13.000 \cdot x})^{2.000}}$

In the point $M_0(a_0,\, kek_0,\, x_0) = (3.142,\, 13.000,\, 1.000)$ it's value $= 1.13150$!!!

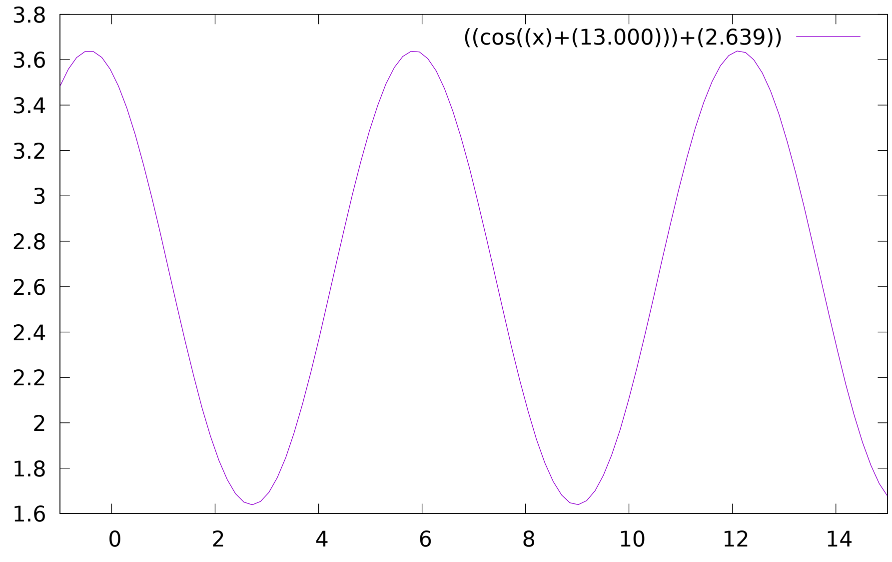
4 Exploration the expression as a function of the first variable

Now let's consider the expression as a function of the first variable a: f(a) $= \cos\left(a + 13.000\right) + 2.639$

Decomposing on Macloren's formula **Maklorens formula for** $a \to a_0 = 3.142$:

f(a) $= 1.732$+o(1.000)

Graphics **Graph** f(a) $= \cos\left(a + 13.000\right) + 2.639$ on the diapasone $a \in [-1 : 15]$:



Equations in the point **Tangent equation** in the point $a_0 = 0.200$:

f(a) $= (-0.592) \cdot (a - 0.200) + 3.445$

Normal equation in the point $a_0 = 0.200$:

f(a) $= 1.689 \cdot (a - 0.200) + 3.445$

Their graphs in $\delta = 2.50000$ coverage of the point $a_0 = 0.200000$