CrInGeCrInGeProduction. Supercringeint roduction here:

Let's calculate smth with expression given: $f(x, y) = x \cdot y^{2.000}$ Firstly, let's insert all constants and simplify it: $f(x, y) = x \cdot y^{2.000}$ BRITISH SCIENTISTS WERE SHOCKED, WHEN THEY COUNT IT!!! In the point (x = 3.000, y = 2.000)it's value = 12.000

1 step: finding a derivation of function:

y

If someone asked me that in the middle of the night, I wouldn't hesitate to say:

1.000

2 step: finding a derivation of function:

 $y^{2.000}$

It's really easy to find:

 $2.000 \cdot y$

3 step: finding a derivation of function:

x

Even my two-aged sister knows that it equals:

1.000

4 step: finding a derivation of function:

 $x \cdot y^{2.000}$

It's simple as fuck:

 $y^{2.000} + 2.000 \cdot y \cdot x$

Congratulations! The first derivation of the expression is:

 $y^{2.000} + 2.000 \cdot y \cdot x$

In the point (x = 3.000, y = 2.000) it's value = 16.000

Let's calculate the 3 derivation of the expression:

Calculating the 1 derivation of the expression:

1 step: finding a derivation of function:

y

If someone asked me that in the middle of the night, I wouldn't hesitate to say:

1.000

2 step: finding a derivation of function:

 $y^{2.000}$

It's simple as fuck:

 $2.000 \cdot y$

3 step: finding a derivation of function:

x

It's really easy to find:

1.000

4 step: finding a derivation of function:

 $x \cdot y^{2.000}$

Even my two-aged sister knows that it equals:

 $y^{2.000} + 2.000 \cdot y \cdot x$

Calculating the 2 derivation of the expression:

1 step: finding a derivation of function:

 \boldsymbol{x}

Man... Just look:

1.000

2 step: finding a derivation of function:

y

It's really easy to find:

1.000

 $3~\mathrm{step} \colon$ finding a derivation of function:

2.000

Even my two-aged sister knows that it equals:

0.000

4 step: finding a derivation of function:

 $2.000 \cdot y$

Even my two-aged sister knows that it equals:

2.000

 $5~\mathrm{step}\colon$ finding a derivation of function:

 $2.000 \cdot y \cdot x$

It's simple as fuck:

 $2.000 \cdot x + 2.000 \cdot y$

6 step: finding a derivation of function:

y

Man... Just look:

1.000

 $y^{2.000}$ If someone asked me that in the middle of the night, I wouldn't hesitate to say: $2.000 \cdot y$ 8 step: finding a derivation of function: $y^{2.000} + 2.000\cdot y\cdot x$ It's really easy to find: $2.000 \cdot y + 2.000 \cdot x + 2.000 \cdot y$ Calculating the 3 derivation of the expression: 1 step: finding a derivation of function: yIt's simple as fuck: 1.000 2 step: finding a derivation of function: 2.000 It's really easy to find: 0.0003 step: finding a derivation of function: $2.000 \cdot y$ Even my two-aged sister knows that it equals: 2.0004 step: finding a derivation of function: \boldsymbol{x} It's really easy to find: 1.000 5 step: finding a derivation of function: 2.000It's really easy to find: 0.0006 step: finding a derivation of function: $2.000 \cdot x$ If someone asked me that in the middle of the night, I wouldn't hesitate to say: 2.0007 step: finding a derivation of function: $2.000 \cdot x + 2.000 \cdot y$ Even my two-aged sister knows that it equals: 4.0008 step: finding a derivation of function: yMan... Just look: 1.000 9 step: finding a derivation of function: 2.000Even my two-aged sister knows that it equals: 0.00010 step: finding a derivation of function: $2.000 \cdot y$ It's simple as fuck: 2.00011 step: finding a derivation of function: $2.000 \cdot y + 2.000 \cdot x + 2.000 \cdot y$ Even my two-aged sister knows that it equals: 6.000Finally... The 3 derivation of the expression: 6.000 BRITISH SCIENTISTS WERE SHOCKED AGAIN, WHEN THEY COUNT THE 3 DERIVATION OF THIS EXPRESSION!!! In the point (x = 3.000, y = 2.000)it's value = 6.000 Partial derivation of the expression on the variable 'x': $\frac{\partial f}{\partial x} = 4.000$ In the point (x = 3.000, y = 2.000) it's value = 4.000000!!! Partial derivation of the expression on the variable 'y': $\frac{\partial f}{\partial y} = 3.000 \cdot 2.000 \cdot y$ In the point (x = 3.000, y = 2.000) it's value = 12.0000000 !!! Full derivation: $\sqrt{16.000 + (3.000 \cdot 2.000 \cdot y)^{2.000}}$ In the point (x = 3.000, y = 2.000)it's value = 12.649 !!! Let's consider the expression as a function of x variable: f(x) = $4.000 \cdot x$ Maklorens formula for $x \to 3.000$: $f(x) = 12.000 + 4.000 \cdot (x - 3.000) + o((x - 3.000)^{4.000})$ Graph f(x):

7 step: finding a derivation of function:

Tangent equation in point -2.000: $f(\mathbf{x}) = 4.000 \cdot (x - (-2.000)) + (-8.000)$ Normal equation in point -2.000: $f(\mathbf{x}) = (-0.250) \cdot (x - (-2.000)) + (-8.000)$