CrIn Ge CrIn Ge Production. Supercringe introduction here:

```
Let's calculate smth with a given function: f(x, y) = \sin x \cdot y^{2.000}
   Firstly, let's insert all constants and simplify this expression: f(x, y) = \sin x \cdot y^{2.000}
   BRITISH SCIENTISTS WERE SHOCKED, WHEN THEY COUNT IT!!!
   In the point M_0(x_0, y_0) = (3.000, 2.000) it's value = 0.564
   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:
   While preparing for exams, I learned a lot of new things, for example:
   (y)' =
=?h?o?w? =
= 1.000
   2 step. finding a derivation of:
   y^{2.000}
   It's really easy to find:
   (y^{2.000})' =
=?h?o?w? =
= 2.000 \cdot y
   3 step. finding a derivation of:
   My roommate mumbled it in his sleep all night:
   (x)' =
=?h?o?w? =
= 1.000
   4 step. finding a derivation of:
   \sin x
   Sounds logical that it is the same as:
   (\sin x)' =
=?h?o?w? =
   5 step. finding a derivation of:
   \sin x \cdot y^{2.000}
   For centuries, people have hunted for the secret knowledge that: (\sin x \cdot y^{2.000})' \; = \;
=?h?o?w? =
= \cos x \cdot y^{2.000} + 2.000 \cdot y \cdot \sin x
   Congratulations! The first derivation of the expression is:
   \cos x \cdot y^{2.000} + 2.000 \cdot y \cdot \sin xIn the point M_0(x_0, y_0) = (3.000, 2.000) it's value = -3.395
   Let's calculate the 0 derivation of the expression:
   Finally... The 0 derivation of the expression: \sin x \cdot y^{2.000}
   BRITISH SCIENTISTS WERE SHOCKED AGAIN, WHEN THEY COUNT THE 0 DERIVATION OF THIS EXPRESSION!!!
   In the point M_0(x_0, y_0) = (3.000, 2.000) it's value = 0.564
   Partial derivation of the expression on the variable x:
    \frac{\partial f}{\partial x} = 4.000 \cdot \cos x
   In the point M_0(x_0, y_0) = (3.000, 2.000) it's value = -3.959970!!!
   Partial derivation of the expression on the variable y:
    \frac{\partial f}{\partial y} = 0.141 \cdot 2.000 \cdot y
   In the point M_0(x_0, y_0) = (3.000, 2.000) it's value = 0.564480 !!!
   Full derivation:
    \sqrt{(4.000 \cdot \cos x)^{2.000} + (0.141 \cdot 2.000 \cdot y)^{2.000}}
   In the point M_0(x_0, y_0) = (3.000, 2.000) it's value = 4.000!!!
   Now let's consider the expression as a function of x variable: f(x) = 4.000 \cdot \sin x
   Maklorens formula for x \rightarrow x_0 = 3.000:
   f(x) = 0.564 + (-3.960) \cdot (x - 3.000) + (-0.282) \cdot (x - 3.000)^{2.000} + 0.660 \cdot (x - 3.000)^{3.000} + 0.024 \cdot (x - 3.000)^{4.000} + o((x - 3.000)^{4.000})
   Graph f(x):
```

Tangent equation in the point $x_0 = 0.000$: $f(x) = 4.000 \cdot x$ **Normal equation** in the point $x_0 = 0.000$: $f(x) = (-0.250) \cdot (x - 0.000) + 0.000$