

CrInGeCrInGe Production. Super cringe introduction here:
 Let's calculate smth with expression given: $f(x, y, z) =$

$$\frac{x+y}{z} - 13.000 \cdot x \cdot \sin y$$

Firstly, let's insert all constants and simplify it:

$$\frac{x+y}{z} - 13.000 \cdot x \cdot \sin y$$

BRITISH SCIENTISTS WERE SHOCKED, WHEN THEY COUNT IT!!! IN
 THE POINT ($x = 0.500$, $y = 1.000$, $z = 5.000$)IT'S VALUE = -5.170 !!!

1 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

2 step: finding a derivation of function:

$$\sin y$$

here it is:

$$\cos y$$

3 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

4 step: finding a derivation of function:

$$13.000$$

here it is:

$$0.000$$

5 step: finding a derivation of function:

$$13.000 \cdot x$$

here it is:

$$13.000$$

6 step: finding a derivation of function:

$$13.000 \cdot x \cdot \sin y$$

here it is:

$$13.000 \cdot \sin y + \cos y \cdot 13.000 \cdot x$$

7 step: finding a derivation of function:

$$z$$

here it is:

$$1.000$$

8 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

9 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

10 step: finding a derivation of function:

$$x + y$$

here it is:

$$2.000$$

11 step: finding a derivation of function:

$$\frac{x + y}{z}$$

here it is:

$$\frac{2.000 \cdot z - (x + y)}{z^{2.000}}$$

12 step: finding a derivation of function:

$$\frac{x + y}{z} - 13.000 \cdot x \cdot \sin y$$

here it is:

$$\frac{2.000 \cdot z - (x + y)}{z^{2.000}} - (13.000 \cdot \sin y + \cos y \cdot 13.000 \cdot x)$$

Congratulations! The first derivation of the expression is:

$$\frac{2.000 \cdot z - (x + y)}{z^{2.000}} - (13.000 \cdot \sin y + \cos y \cdot 13.000 \cdot x)$$

IN THE POINT (x = 0.500, y = 1.000, z = 5.000)IT'S VALUE = -14.111 !!!

Let's calculate the 2 derivation of the expression:

Calculating the 1 derivation of the expression:

1 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

2 step: finding a derivation of function:

$$\sin y$$

here it is:

$$\cos y$$

3 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

4 step: finding a derivation of function:

$$13.000$$

here it is:

$$0.000$$

5 step: finding a derivation of function:

$$13.000 \cdot x$$

here it is:

$$13.000$$

6 step: finding a derivation of function:

$$13.000 \cdot x \cdot \sin y$$

here it is:

$$13.000 \cdot \sin y + \cos y \cdot 13.000 \cdot x$$

7 step: finding a derivation of function:

$$z$$

here it is:

$$1.000$$

8 step: finding a derivation of function:

$$y$$

$$3$$

here it is:

$$1.000$$

9 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

10 step: finding a derivation of function:

$$x + y$$

here it is:

$$2.000$$

11 step: finding a derivation of function:

$$\frac{x + y}{z}$$

here it is:

$$\frac{2.000 \cdot z - (x + y)}{z^{2.000}}$$

12 step: finding a derivation of function:

$$\frac{x + y}{z} - 13.000 \cdot x \cdot \sin y$$

here it is:

$$\frac{2.000 \cdot z - (x + y)}{z^{2.000}} - (13.000 \cdot \sin y + \cos y \cdot 13.000 \cdot x)$$

Calculating the 2 derivation of the expression:

1 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

2 step: finding a derivation of function:

$$13.000$$

here it is:

$$0.000$$

3 step: finding a derivation of function:

$$13.000 \cdot x$$

here it is:

$$13.000$$

4 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

5 step: finding a derivation of function:

$$\cos y$$

here it is:

$$(-1.000) \cdot \sin y$$

6 step: finding a derivation of function:

$$\cos y \cdot 13.000 \cdot x$$

here it is:

$$(-1.000) \cdot \sin y \cdot 13.000 \cdot x + 13.000 \cdot \cos y$$

7 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

8 step: finding a derivation of function:

$$\sin y$$

here it is:

$$\cos y$$

9 step: finding a derivation of function:

$$13.000$$

here it is:

$$0.000$$

10 step: finding a derivation of function:

$$13.000 \cdot \sin y$$

here it is:

$$13.000 \cdot \cos y$$

11 step: finding a derivation of function:

$$(13.000 \cdot \sin y + \cos y \cdot 13.000 \cdot x)$$

here it is:

$$13.000 \cdot \cos y + (-1.000) \cdot \sin y \cdot 13.000 \cdot x + 13.000 \cdot \cos y$$

12 step: finding a derivation of function:

$$z$$

here it is:

$$1.000$$

13 step: finding a derivation of function:

$$z^{2.000}$$

here it is:

$$2.000 \cdot z$$

14 step: finding a derivation of function:

$$y$$

here it is:

$$1.000$$

15 step: finding a derivation of function:

$$x$$

here it is:

$$1.000$$

16 step: finding a derivation of function:

$$(x + y)$$

here it is:

$$2.000$$

17 step: finding a derivation of function:

$$z$$

here it is:

$$1.000$$

18 step: finding a derivation of function:

$$2.000$$

here it is:

$$0.000$$

19 step: finding a derivation of function:

$$2.000 \cdot z$$

here it is:

$$2.000$$

20 step: finding a derivation of function:

$$2.000 \cdot z - (x + y)$$

here it is:

$$0.000$$

21 step: finding a derivation of function:

$$\frac{2.000 \cdot z - (x + y)}{z^{2.000}}$$

here it is:

$$\frac{(-1.000) \cdot 2.000 \cdot z \cdot (2.000 \cdot z - (x + y))}{(z^{2.000})^{2.000}}$$

22 step: finding a derivation of function:

$$\frac{2.000 \cdot z - (x + y)}{z^{2.000}} - (13.000 \cdot \sin y + \cos y \cdot 13.000 \cdot x)$$

here it is:

$$\frac{(-1.000) \cdot 2.000 \cdot z \cdot (2.000 \cdot z - (x + y))}{(z^{2.000})^{2.000}} - (13.000 \cdot \cos y + (-1.000) \cdot \sin y \cdot 13.000 \cdot x + 13.000 \cdot \cos y)$$

Finally... The 2 derivation of the expression:

$$\frac{(-1.000) \cdot 2.000 \cdot z \cdot (2.000 \cdot z - (x + y))}{(z^{2.000})^{2.000}} - (13.000 \cdot \cos y + (-1.000) \cdot \sin y \cdot 13.000 \cdot x + 13.000 \cdot \cos y)$$

BRITISH SCIENTISTS WERE SHOCKED, WHEN THEY COUNT THE 2 DERIVATION OF THIS EXPRESSION!!! IN THE POINT (x = 0.500, y = 1.000, z = 5.000)IT'S VALUE = -8.714 !!!

Partial derivation of the expression on the variable 'x':

$$-10.739$$

IN THE POINT (x = 0.500, y = 1.000, z = 5.000) IT'S VALUE = -10.739123 !!!

Partial derivation of the expression on the variable 'y':

$$0.200 - 6.500 \cdot \cos y$$

IN THE POINT (x = 0.500, y = 1.000, z = 5.000) IT'S VALUE = -3.311965 !!!
 Partial derivation of the expression on the variable 'z':

$$\frac{(-1.500)}{z^{2.000}}$$

IN THE POINT (x = 0.500, y = 1.000, z = 5.000) IT'S VALUE = -0.060000 !!!
 Full derivation:

$$\sqrt{115.329 + (0.200 - 6.500 \cdot \cos y)^{2.000} + \left(\frac{(-1.500)}{z^{2.000}}\right)^{2.000}}$$

IN THE POINT (x = 0.500, y = 1.000, z = 5.000) IT'S VALUE = 11.238 !!!
 Let's consider the expression as a function of x variable: f(x) =

$$\frac{x + 1.000}{5.000} - 0.841 \cdot 13.000 \cdot x$$

Maklorens formula for x near to 0.500000:

$$(-5.170) + (-10.739) \cdot (x - 0.500)$$

And remainig member is o maloe from:

$$(x - 0.500)^{3.000}$$

Graph f(x):

Tangent equation in point 1.000: f(x) =

$$(-10.739) \cdot (x - 1.000) + (-10.539)$$

Normal equation in point 1.000: f(x) =

$$0.093 \cdot (x - 1.000) + (-10.539)$$